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France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of March 23rd, 1846, M. Mathieu in the Chair.

Digestion of Sugar and Starch, and Treatment of Diabetes Mellitus by the Exhibition of Alkalies.—Dr. Mialhe has on two occasions already directed the attention of the Academy towards this subject (see *Medical Times*, vol. xii pp. 40 and 184). At the meeting of March 23rd, M. Payen read the report of the commission appointed by the Institute to examine M. Mialhe's researches. Adopting the recently-received theory of the disaggregation of azotised substances in the digestive organs, Dr. Mialhe states that liquefaction results from the action of an acid on pepsin, a phenomenon which may be compared to the action of diastasis on amylaceous matter. Although it may be readily admitted that it is to the chemical influence of the special elements of the bile, that the assimilation of greasy substances is due, it is by no means so easy to account for the reactions by which saccharine and feculent food is rendered digestible. It is to the solution of the latter problem that Dr. M. has attached himself. Dr. M.'s researches on human saliva have led him to detect in its composition a principle presenting the closest analogy with diastasis, developed in plants, by the progress of vegetation, whenever amylaceous matter is to be dissolved, and carried in a liquid condition through the textures, for the purpose of new organic formations. Notwithstanding the extreme resemblance between diastasis and the substance detected in saliva by Dr. M., that gentleman hesitates in asserting the absolute identity of the two principles in the vegetable and animal kingdoms, and the commission cannot but applaud his reserve, because, in order to establish fully that still dubious fact, it would be necessary to compare the elementary composition of both products—an operation rendered extremely difficult by the apparent impossibility of obtaining perfectly pure substances which do not crystallise, and which are prone to become altered so long as they remain in a state of liquidity. A certain degree of doubt must still, therefore, hang over the solution of this question; but yet Dr. M.'s researches are fraught with interest, and lead to consequences of the highest order of physiological importance. Thus it can no longer be admitted that the elements of saliva do not singly act upon starch, but require to be blended together, in order to display their dissolving powers. Ptyalin, as hitherto prepared, had evidently been deprived of its most valuable properties,—and does not pre-exist in saliva, but is merely the altered animal diastasis, reduced to a state of inertness. Starting from the fact that the influence of alkalies gives to solutions of glucosis the power of reducing the binoxide of copper, the author conceives that the presence of alkalies is indispensable to the assimilation of sugar and starch, and attributes, therefore, diabetes mellitus, not to an undue production of saccharine matter, but to its non-assimilation. This new view of the disease, supported by ancient practical observations, points distinctly to the exhibition of alkalies or their carbonates, together with a highly animal diet, and strict abstinence from amylaceous nutriment, as the method most likely to be followed with success in the treatment of diabetes mellitus. The proximate cause of the disease is, in Dr. M.'s opinion, the absence of the alkaline principles from the blood; and several cases of marked improvement, and, indeed, of complete cure, are adduced in support of the alkaline medication. The commission does not, however, consider these cases to be sufficiently numerous to prove absolutely conclusive, and expresses a wish that Dr. M. should prosecute further his researches on this important subject.

Digestion compared in Carnivorous and Herbivorous Animals, by Dr. Bernard (de Villefranche).—The object of this memoir was to ascertain if the structural differences between the digestive apparatus of carnivorous and herbivorous animals are productive of any well-marked differences in the accomplishment of the functions of digestion and assimilation. The chyme, the chyle, and the urine, have been respectively examined; thus, in a large number of dogs, fed on animal diet exclusively, and sacrificed during the progress of digestion, the chyme in the small intestines was constantly found to be acid; the chyle opaque, homogeneous in consistency, and of a milk-white colour; and the urine transparent amber-coloured, and in a state of marked acidity. In rabbits, fed entirely on vegetables, the chyme was alkaline, the chyle transparent, and the urine clouded and alkaline. That these differences were not due to the special organisation of each class of animals, but to their diet, was clearly proved by another series of experiments. Two dogs and two rabbits, who presented in their urine the above-mentioned characters, were deprived of food for the space of thirty-six hours; at the expiration of that time, the urine, in all four, was clear, amber-coloured, and acid. The animal, during abstinence, living upon its own substance, is in the condition of those fed upon animal diet. In a third set of experiments, rabbits were nourished with animal—dogs with vegetable diet; after a few hours the urine of the former became acid, and the urine of the latter acquired alkaline properties. A constant connection seems, therefore, to exist between the state of the urine, chyme, and chyle, and the nature of the nutriment; and the mere examination of the urine with test-paper, leads to an accurate knowledge of the properties of the chyle and chyme. The following applications illustrate Dr. Bernard's theory:—A solution of cane-sugar is slowly injected into the veins of a dog; the urine remains clear and acid. But if a solution of grape sugar (*sucre de raisin*) be injected into the veins of an animal whose urine is transparent and acid, that fluid becomes speedily clouded and alkaline. The fact is accounted for by the ready assimilation of grape-sugar, and by the circumstance already known, that cane-sugar cannot be assimilated before having previously been submitted to the action of the stomach. Again, it is still admitted by some physiologists, that the section of the par vagum does not arrest the progress of digestion. Dr. B.'s experiments prove this opinion to be erroneous. Two rabbits, fasting for thirty-six hours, and presenting clear acid urine, were fed upon carrots; after two hours, their urine became clouded and alkaline; in one of them the par vagum was then divided; in a very short time, the urine of this animal returned to its acid character, and became transparent; whereas the urinal secretion remained alkaline and opaque in the other rabbit, on whom no operation had been performed.

Hemeralopia, by Dr. Magne.—Professor Arago communicated, on the part of Dr. Magne, the following case, which occasioned much hilarity. A man had presented himself to Dr. M., to be treated for night-blindness, an affection to which he had been subject ever since his birth, and which he referred to an ungratified wish of his mother while pregnant. In giving, very reluctantly, an account of Dr. M.'s case, Professor Arago seemed fearful of being, as in the case of the electric maid, taxed with credulity, and begged most distinctly to assert his disbelief in the existence of any such disease as hemeralopia. On being, however, assured by Professor Roux and Professor Velpeau, that hemeralopia and nyctalopia were forms of disease known for centuries, and on the existence of which no doubt could possibly be entertained, the learned secretary of the Institute observed that, at all events, physicians would not, perhaps, be disposed to admit the second part of Dr. Magne's communication, which appeared of so preposterous a nature, that he was almost ashamed to read it. "Is it a fact, that turkeys

are blind at night?" (Immense laughter.) The mother of the person whose case Dr. Magne brings forward, is stated to have had, during her pregnancy, an ungratified desire for a piece of turkey; and to this circumstance is attributed the disease of the child, who presents, as an aggravating coincidence, a large turkey-comb in one axilla. Prof. A. would only remark on hemeralopia, that if thereby is meant merely a diminution of the powers of vision, in a weak, crepuscular light, it is a fact so common as to be unworthy of attention; if, on the contrary, that term is applied to cases in which vision is perfect by day, and abolished by night, notwithstanding the use of artificial light, of sufficient strength, it is a phenomenon which can in no way be accounted for in the present state of the science of optics.

A NEW SIGN OF DEATH, by Dr. RIPAULT.—Dr. R. states that, when death is only apparent, lateral pressure on the eyeball does not change the shape of the pupil; but alters its circular form, by displacing the iris, when death is real.

The Meeting of the Institute of March 30th, was entirely consecrated to an uninteresting debate on railway accidents, or rather, on the expediency of calling to this subject the attention of government. No communications were read.

ACADEMY OF MEDICINE.

Meeting of March 31st, 1846, Dr. ROCHE in the Chair.

PARACENTESIS THORACIS IN ACUTE PLEURISY, by Professor TROUSSEAU.—M. Bricheteau made a favourable report on Professor Trousseau's former communication to the Academy on this subject (see *Medical Times*, vol. xii. p. 29).—M. Louis remarked that much reserve should be shown in recommending the operation: for his part, he had seen a very large number of cases of acute pleurisy; he never saw one which terminated fatally, or which would have warranted thoracentesis.—Dr Rouchoux stated that, although the cases to which the operation is applicable are very rare, still they exist: he recollected a patient who died in thirty-six hours of a double pleurisy with effusion. Post-mortem examination showed the lungs had preserved their elasticity, and that life might have been saved by the operation. Paracentesis thoracis, in Dr. Rouchoux' opinion, is more frequently indicated in acute than in chronic pleuritis; in the latter, the lung, compressed for a long space of time by accumulated fluid, loses, in a great measure, its powers of expansion, and the operation remains, to say the least, useless.—M. Honoré · The reporter has mentioned that, out of fifty-five patients operated on for empyema, fourteen died; this is an unusually large proportion.—M. Bricheteau having answered in a few words to the foregoing observations, the report was unanimously adopted.

MEMOIR ON THE VAGINO-VULVULAR GLAND AND THE VARIOUS ORGANS OF SECRETION, IN THE EXTERNAL (FEMALE) GENITAL ORGANS; by Dr. HUGUIER.—The vagino-vulvular gland, described by Bartholin and mentioned by several ancient writers, seems to have been entirely forgotten by modern anatomists. Its size is that of an almond; it is situated on each side at the union of the vagina and vulva, and opens by an excretory duct, seven or eight lines in length, in the groove which separates the labia from the hymen. This organ swells at the catamenial periods, and is more specially affected by sexual excitement; at all times where, in a healthy condition, the gland secretes a perfectly transparent fluid, any opacity of the secretion denotes disease. Its development always corresponds with that of the ovary of the same side, not only in the physiological but also in the pathological state —a circumstance which, if verified, would certainly prove invaluable to the diagnosis of ovarian disease. Dr. H. considers these glands as analogous in nature, functions, seat, and structure, to Cowper's glands in the male.

PARISIAN MEDICAL SOCIETY.

Meeting of April 1, 1846.

Dr. Watts having left Paris, Dr. Fleming, late president of the Royal Society of Edinburgh, was unanimously elected to fill the office of vice-president.

HOSPITAL OF LA CHARITE.

AORTIC ANEURISM COMMUNICATING WITH THE BRONCHI; by Prof. CRUVEILHIER.—J., aged sixty-three, was admitted into Prof. Cruveilhier's ward on February 1, 1846. He had been on four different occasions affected with acute pneumonia, and had suffered five months since from hæmoptysis, accompanied with deep-seated, dull pains in the left side of the chest, but he had been confined to his bed only six weeks before admission. Venesection and leeches having produced only temporary relief, he was brought to the hospital, where he died six days after. On being examined the day of his entrance, he presented the following symptoms:—Face pale and emaciated; pulse frequent, small, and irregular; tongue and lips dry and pale, and covered with a thick crust of coagulated blood. The thirst was intense, and the appetite was altogether destroyed; the bowels costive; considerable pain in the left side of thorax, extending from the breast to the false ribs. Expectoration of black coagulated blood mixed with viscid sputa; both sides of the chest were dull on percussion, posteriorly the dulness extending into the axillæ. In the right lung puerile respiration was manifest; in the left in front, mucous râle under the clavicle; posteriorly, vesicular murmurs so weak as to be almost inaudible, and dry crepitus at the lower parts. The sounds of the heart were natural, and the apex of the organ was very much deviated to the left.

Post-mortem Examination.—Pleural adhesions united both lungs to the walls of the chest; in the pericardium was found a small amount of serum; the heart was slightly hypertrophied, but its valves were healthy, and the principal anatomical alterations were found to occupy the arch of the aorta and the lung. From its origin to the arch inclusively, the aorta was gradually dilated, and the left and anterior wall of the artery was destroyed, and replaced by a brownish clot of blood of the size of a large egg, and formed of interwoven fibres, recalling by their disposition the internal aspect of the heart. This sanguineous plug was received in a cavity formed by the upper half of the inferior lobe, and a great portion of the superior left pulmonary lobe. When it was removed, several bronchi of minor size were found perforated, and partly closed by ancient and recent fibrinous deposits. The inferior part of the left lung was in a state of acute inflammation, and the bodies of the third and fourth dorsal vertebræ were worn and eroded by the tumour. The right lung was œdematous.

MILITARY HOSPITAL, GROS CAILLOU.

OSSIFICATION OF ARTERIES.—GANGRENE; by Dr. BROUSSAIS.—An old soldier, aged sixty-seven, was admitted, on the 17th of February, into Dr. Broussais' ward, complaining of headach and oppression; he was slightly relieved by immediate venesection; but, on being examined the next morning, pneumonia was detected in the right lung (dulness, crepitation, bronchial souffle, and bronchophony). Expectoration green and viscid. Venesection was repeated night and morning, and thirty leeches were applied to the chest. The blood was very fibrinous, and relief was experienced. Tartar emetic, eight and ten grains, were exhibited on the two following days, and the pneumonia seemed to be doing well, when heaviness and somnolency appeared; on the 26th of February a severe pain was complained of in the left leg, but no redness or swelling could be discovered. The next day a broad black stain appeared with phlyctenæ. The pulse was very small, at 100. Notwithstanding the exhibition of wine and stimulants, the gangrene extended, and in another day the left forearm became enormously distended, and death occurred on the 28th. On dissection, numerous ossifications were met with in the arteries of both inferior extremities, and in the brachial arteries. The popliteal nerve and left brachial plexus were in a state of violent inflammation, characterised by sanguineous injection of the neurilemma of the cellular structures, and also by circumscribed redness of the nervous filaments.

HOSPITAL NECKER.

EXTRACTION OF THE EYE-BALL.—CURE; by Dr. LENOIR.—A girl, aged nineteen, of a lymphatic temperament, was admitted under M. Lenoir's care on the 10th of January, 1846; she referred her disease to a fall which occurred in 1830, in which her face was wounded, and which left on the cornea of each eye stains still perceptible. In 1837 she consulted Prof. Sanson for her eyes, and the diagnosis which that surgeon wrote on his prescription was, blepharo-conjunctivitis on both sides, with albugo and pseudo-cataract of the right eye; both eyes were at the time cauterised every second or third day, and from that period forward the right eye has gradually increased in size. At the period of admission her eyes were in the following condition:—On the right side chronic inflammation of the follicles of the lashes; the eye-ball is evidently larger than the other, and the increase of size seems more particularly to bear upon its anterior half. The lids can still, however, by a slight effort, be made to cover the entire surface of the eye. The conjunctiva is very much injected; a circle, of a bluish colour, extends about two lines in breadth all round the cornea, which presents several stains. The iris is very much dilated, and insensible to light, although it is occasionally the seat of a sort of tremulous movement. In the posterior chamber could be seen a whitish substance presenting the aspect of cancer of the retina. Vision was completely abolished. In the left eye, with the exception of some slight nebulæ, vision was perfect. Believing in the existence of malignant disease, M. Lenoir was easily induced to remove the eye, useless as an organ of vision, and constituting a deformity by its size. The operation was performed according to the method recommended by Bonnet (of Lyons). That surgeon has carefully described a fibrous capsule, wherein the posterior part of the eye-ball is received very much in the same manner as the acorn in its cupula. This aponeurosis, called by Cruveilhier "orbito-ocular aponeurosis," is concave anteriorly, and inserted around the anterior extremity of the optic nerve with the neurilemma of which it seems continuous, and surrounds, without any intimate adhesion, the two posterior thirds of the eye-ball. Its anterior attachments are double, the fibrous lap dividing into two fasciæ; the thickest and most anterior of which is inserted to the edge of the tarsal cartilages, the other terminating around the cornea, underneath the conjunctiva. This aponeurosis isolates the eye-ball from the fat, the arteries, veins, and nerves of the orbit, and furnishes fibrous investments to the muscles; and on its disposition M. Bonnet has founded a new operation for the extraction of the globe of the eye. It was this method M. Lenoir employed in the present case. The ocular conjunctiva was first raised at one line inside the cornea, and incised with a pair of curved scissors, which were afterwards carried round the cornea so as to divide the conjunctiva completely. The six muscles of the eye were then divided; and the scissors were carried along the external face of the eye-ball, and the optic nerve was cut close to the sclerotic membrane, in front of the posterior insertion of the aponeurosis. Very little pain was experienced during the operation, and not half an ounce of blood escaped. The wound was dressed with cold water. On dissection of the eye-ball, the sclerotic membrane was found very much thinned in several parts; the crystalline lens was opaque, and partly absorbed; it was the remains of the lens in the posterior chamber which had been taken for a malignant growth. The patient did well, and left the hospital cured on the 14th of February.

TREATMENT OF DIABETES MELLITUS BY BALSAM OF PERU.—The *Journal des Connaissances Medico-Chirurgicales* reports a fact of great importance, if experience will confirm it.

A man, forty years of age, of cachectic constitution, presented all the symptoms of diabetes. Dr. Vanhes prescribed immediately forty to fifty

drops of balsam of Peru, to be taken three or four times a-day, and recommended him to save his urine.

At the end of a week's treatment, the patient, who perceived his condition already ameliorated, brought his urine to the author. On evaporation, this urine furnished a residue having the odour, consistence, and appearance of honey. Combustion disengaged the smell of caramel. The urine of the patient, kept for several days, became acid. whilst natural urine becomes ammoniacal.

The diagnosis thus confirmed: Dr. Vanhes raised the dose of balsam Peru to four or five teaspoonfuls daily; the result surpassed his expectations. After three weeks treatment, the thirst had disappeared, and the patient passed urine once only in the night. At the end of five weeks, the urine having taken its normal characters, and the patient being entirely re-established, the balsam of Peru was discontinued.

DAN. MACARTHY, D.M.P.

Germany.

(From our own Correspondent at Vienna.)

ON THE LAWS OF THE FORMATION OF THE SPERMATIC FILAMENTS; by Professor KÖLLIKER. — The recent investigations of this author have conducted him to results, thus far of great importance, that they lead to general laws, which are valid in regard to all animals. The author has enunciated these results as follows:—I. The element out of which the spermatic filaments are formed consists of simple nucleated cells or organs, which originate from the transformations of a single cell. The principal varieties of this element are: 1. Large cells, with numerous nuclei; these are found in the mammalia, in birds, fishes, amphibia, plagiostoma, arachnida, cephalopoda. 2. Parent cells, with numerous mononucleated filial cells, are found in locustiva, coleoptera, libellulida, radiata, and partly in polypi. 3. Aggregations of mononucleated cells, with a naked central mass connecting them together, characterise many of the annelides, and probably all the gasteropoda. 4. Aggregations of mononucleated cells, without the central connecting mass, are found in amphioxus, musca, partly in annelides, trematoda, conchae, echinorhynchus, planaria, and nemertes. (?) II. The spermatic filaments are formed endogenously, probably always, in the nuclei of the above-mentioned cells, and one spermatic filament in one nucleus. The filaments originate from the deposition of the (fluid?) contents of the nucleus upon its membrane, and, perhaps in all cases, grow independently till they reach their final form and magnitude. III. The spermatic filaments are freed by the dissolution of their parent cells and nuclei, and are often found, even in cells, united together in bundles.—*Froriep's New Notices*, No. 789

ON THE EFFECT OF BLOOD-LETTING ON ANIMAL HEAT; BY PROFESSOR H. NASSE.—This writer has made numerous experiments on dogs, rabbits, and goats. Five or seven hours after feeding them he abstracted six or eight ounces of blood, and during the time which elapsed, from five minutes to four hours, after the venesection, he exactly determined their animal heat by means of a thermometer introduced into the vagina and intestinum rectum. He found that the diminution of the blood, and its necessary consequence, diminution of the blood-corpuscles, was by no means followed by a decrease, but by an increase of the animal heat. Nasse explains this phenomenon in the following manner:—1. The functions of respiration and circulation are much accelerated after bleeding. 2. The power of absorption possessed by the vessels is increased; the fat deposited in the cellular tissue by this means reaches the blood, where it is used as the most available fuel. 3. All the watery secretions are at once lessened by bleeding; in this way less heat is lost. It is evident this observation of Nasse's directly contradicts the law laid down by Prévost and Dumas, that the heat of animals is in direct proportion to the number of their blood corpuscles, because if, in the same animal, the heat can increase with the diminution of the blood corpuscles, only when circulation and respiration become accelerated; it is scarcely credible that, in different species of animals, where the number of pulsations and respirations so greatly varies, the quantity of the blood corpuscles should be the only circumstance affecting the heat. When the animal classes of fishes, reptiles, birds, and mammalia are compared with each other, this law obtains, in a general sense, though, in comparing birds with mammalia, numerous exceptions are found. Nasse has often observed a greater degree of heat in geese, turkeys, and hens than in mammalia, though the number of blood corpuscles is not greater in the former than in the latter. If the mammalia be compared with each other, we find the greatest contradictions, though, by this means, the law should be clearly established, since these animals, similar in conformation, differ in the number of blood corpuscles, and in the grade of animal heat. As regards heat, the domestic animals stand in the following succession:—swine, goats, rabbits, dogs, and horses; arranged according to the number of blood corpuscles:—swine, dogs, horses, rabbits, goats. That the number of pulsations does not compensate this difference is proved by the fact that, in the dog, the number of pulsations surpasses that of the goat by twenty beats, and yet the former has always a greater number of blood corpuscles, and a less degree of heat, than in the latter. Finally, as are also the latest researches of Roger, the pathological fact that, in man (according to Andral), the animal heat remains always the same, even during the greatest poverty, in respect of blood corpuscles, is unfavourable to the universal validity of Prévost and Dumas.—*Med. Corr. of the Rhenish and Westpl. Physicians, 15th Nov.*, 1845.

ANALYSIS OF CONCRETIONS OF THE LUNGS; BY BARON GORUP BESANEZ, M.D.—This investigation has a double interest for our readers, because, in the first place, Dr. Wright's masterly essay on this subject (*Medical Times*, Nov. 15, 1845) does not contain a similar case, and because his enunciation, "concretions are chiefly found in the lungs of consumptive patients, and others whose lungs are the seat of chronic morbid lesion," is somewhat qualified by the observations of Gorup-Besanez. A man, aged forty-five, strong and muscular, fell down a stair when drunk, and died from fracture of the skull. Dissection showed nothing abnormal, except the injury of the cranium. In the lungs, however, a coral-like ossification was found in the parenchyma, in the course of the smaller bronchial ramifications. This concretion was as thick as a crow quill, ramified through the whole length and breadth of the lungs, and, when taken out, broke with a crack. For the rest, the lungs were free from tubercles, cicatrisations, or hepatisations, freely admitted air and blood, and the man had been subjected to hard labour as a bricklayer's assistant, without ever complaining of annoyance from asthma. The fragments had quite the form of bronchial ramifications—were hard, but not heavy—transparent, and greyish yellow. Their chemical composition was as follows:

Fatty matters and traces of soluble salts	17·17
Mucus	32·46
Phosphate and carbonate of lime, with traces of oxide of iron	50·37
	100·00

—*Heller's Archive of Physiol and Pathol., Chem. and Microscopy*, p 16, Feb. 1846

ON THE EXTRACTIVE MATTERS OF THE URINE; BY PROFESSOR SCHERER.—Under this name a mixture of substances was long understood, which, after a separation of the more characteristic urinary constituents—viz., of the urea, uric acid, and saline matters, was obtained as a body partly soluble in water, partly in alcohol. This body was obviously a compound of substances partly organic, partly inorganic. Scherer has made the colouring matter of the urine—which, after a preliminary inquiry, seemed to be the chief ingredient of these extractive substances—the subject of further investigation. In order to obtain this material as nearly as possible in the form in which it exists in the urine, he proceeded in the following manner:—1. Urine, recently evacuated, was treated with a solution of nitrate of barytes to get rid of the sulphuric, phosphoric, uric, and sometimes also of the carbonic, acids. The precipitate, separated by filtration, consisted of a compound of barytes with the above acids, and also contained mucus of the bladder and colouring matter of the bile, when the urine contained any of the latter. In the latter case the colour of the precipitate would be green or pale blue, according to the quantity of the colouring matter. When the precipitate was subjected to heat and treated with hydrochloric acid and alcohol, distinct traces of the colouring matter of the bile were found in the urine, even of healthy individuals, especially in summer. By evaporating the alcohol, and washing the residuum with water, the colouring matter may be obtained in a solid state. 2. The filtered solution was treated with a neutral one of acetate of lead, until no further precipitate was formed. The precipitate obtained was then filtered and washed. It appeared highly coloured, and, besides chloride of lead, contained the greatest quantity of the extractive colouring matter. The precipitate was now treated with hydrochloric acid and alcohol During this operation the alcohol takes a red or dark brown colour, according to the nature of the colouring matter and the concentration of the solution, and can now be easily separated by *cold* filtration from the newly formed and obviously present chloride of lead, which is insoluble in alcohol. If the alcoholic solution be now evaporated as quickly as possible in flat vessels in a water-bath, a heavy substance, of a dark-brown or black colour, will remain, from which the remaining traces of muriatic acid can be removed by washing with cold distilled water. By drying, the black mass becomes pulverisable. The powder obtained contains scarcely a perceptible trace of incombustible residuum. It is almost insoluble in cold—somewhat more so in warm—water; easily soluble in free alkalies and their carbonates; also in alcohol—viz., when a free acid is present; but not so easily in alcohol with free alkalies and their carbonates. It burns with a peculiar smell, which is very different from that of burning urine, and more resembles that of humin, with which substance it has a great likeness. 3 The filtered fluid, which was still slightly coloured, was now treated with basic acetate of lead, and by this means a precipitate was again obtained, abundant, but less coloured. This was also filtered and washed. If this precipitate be treated in the same manner as the former one, a coloured powder is also obtained, but in a smaller quantity, and of a brighter hue 4. The filtered fluid was now quite colourless, it contained urea and the residuary salts of barytes and lead. If these salts be removed by means of sulphuric acid, the fluid, by concentration and with a disengagement of acetic acid, yields a yellowish syrup-like mass, from which a part of the urea will come out as a nitrate by crystallisation; the greater part, however, will be changed into ammonia. Lactic acid is not to be discovered in this fluid. While Scherer in this manner obtained the colouring matter of the urine from the secretions of several healthy and unhealthy individuals, and made repeated elementary analyses with it, he arrived at a number of important results. Thus, he found that the part of this colouring matter richest in carbon and hydrogen was precipitated by neutral acetate of lead; the part poorest in these elements by basic acetate of lead, which is also the cause that the precipitate obtained by the neutral salt has a deeper colour than that obtained from the reaction of the basic salt. Further, it appears that, in general, the quantity of colouring matter obtained from precipitation with the neutral salt is less in those cases where the colouring matter is highly oxidised than where it exists in a lower grade of oxidation. Where a portion of the colouring matter exists in a very slightly oxidised state, it is extremely easy to obtain the part most slightly oxidised, by bringing the urine to the boiling point and then mixing it with concentrated hydrochloric acid. All urine so treated becomes dark-coloured, and when it contains slightly oxidised colouring matter, during cooling it deposits—besides crystalline uric acid—a considerable quantity of this colouring matter as a fine powder, of a dark brown, often even bluish, colour. This sediment is easily soluble in alcohol, and, therefore, can be obtained free from uric acid. In this manner it can be easily ascertained whether the colouring matter of urine, in a pathological state, contains more or less carbon. The darker the urine becomes during a short boiling in a test-tube with hydrochloric acid, and the more dark brown colouring matter it deposits during cooling, the richer it is in this colouring matter, and the latter

contains a proportionately large quantity of carbon. During a long exposure to the air, this colouring matter gradually oxidises, like that of the bile, and in exchange loses in carbon and hydrogen. It is remarkable, in a chemical point of view, that Scherer obtained 18·2 per cent. of sulphate of ammonia, or 3·91 per cent. of nitrogen from treating the extractive colouring matter with sulphuric acid; while Heintz and Ragsky in their quantitative determination of the urea by means of concentrated sulphuric acid, have considered the ammonia arising from the extractive matters, and, therefore, the nitrogen, as existing either in an extremely small quantity, or not at all. The result of his researches affecting pathology and physiology have been summed up by Scherer as follows:—1. The greater portion of that matter, hitherto designated by the name of extractive matter, is a peculiar substance analogous to the animal colouring matters. Hence Scherer calls it the *colouring matter of the urine*. 2. As its elementary composition varies with the varying state of the individual, it differs in this respect from urea, uric acid, &c., the component elementary principles of which always maintain a certain proportion in regard to each other. 3. In regard to elementary composition, this colouring matter is distinguished from the colouring matter of the bile (which probably originates from the venous blood) by containing less carbon and hydrogen. 4. It is probable that both colouring matters, that of the bile as well as that of the urine, are formed from the hematin of the blood, whilst the other matters also existing in the above fluids may possibly arise from the so-called protein compounds of the blood and organic tissues. This will be clearer when these three colouring matters are placed in juxtaposition:—

	Hematin (Mulder.)		Colouring matter of the bile (Scherer.)		Ditto of the urine. (Scherer.)
Carbon...	70·19	......	68·19	......	58·43
Hydrogen	5·76	......	7·17	......	5·16
Nitrogen	11·16	...	7·07	....	8·83
Oxygen	12·59	...	17·26	....	27·58

5. Because the colouring matter of the urine does not always preserve the same proportion in its composition, it is, therefore, clear that it, and the matter out of which it is formed by the vital process, exist in a perennial metamorphosis, and indeed in a metamorphosis which appears to be chiefly that of oxidation or decay. 6. This oxidation affects both the carbon and hydrogen, for the latter is also found in different quantities. 7. During a continued and plentiful use of food rich in carbon—*e. g.*, of fat—the colouring matter of the urine—*ceteris paribus*—appears to leave the body in a somewhat less oxidised state. 8. The greater the consumption in a given time of organic tissues by the vital action of the organism, without a proportionately increased activity of the pulmonary and hepatic functions, the less intensively does the process of decarbonisation take place, though, perhaps, it is more extensive. 9. During the formation of the colouring matter of the urine, relations seem to exist similar to those obtaining during the formation of urea and uric acid. Here, also, we find a more highly carbonised uric acid, co-existing with an increased metamorphosis and an augmented waste of organic matter, when the pulmonary and hepatic functions do not increase in a similar proportion—*i. e.*, when the intensity does not keep pace with the extension of their action. The close analogy with the formation of uric acid may also be concluded from the fact, that in general urine rich in uric acid contains a colouring matter abounding in carbon and hydrogen.—*Wohler and Liebig Ann.*

On the Presence of Copper in the Bile and its Concretions. By Bertozzi, Heller, and Baron Gorup Besanez, M.D.—Bertozzi incinerated the organic substance of the bilious concretions, dissolved the ashes remaining in very diluted hydrochloric acid, filtered the solution, then acidulated it slightly, and passed a current of sulphuretted hydrogen gas through it. In this way he generally obtained a precipitate in dark brown flakes. He now separated the precipitate from the fluid and dissolved it in nitric acid, or in aqua regia. To drive off the excess of acid he evaporated the solution, and again dissolved the dry residuum in distilled water. The solution was now treated with ammonia, in excess, and a scarcely perceptible blue tint was sometimes the result; but when a drop of ferrocyanide of potassium was added, a reddish-brown precipitate was invariably obtained. From fourteen gall-stones which the Milanese chemist analysed in this way, he found that the richer the concretion in the colouring matter of the bile the more evident was the re-action for copper; but in completely white concretions he could find no copper whatever. Bertozzi is of opinion that the copper is derived partly from the food, and partly from copper cooking-vessels, and deposits itself in the liver, like quicksilver, arsenic, and other metallic poisons. From the facts, however, that he could never find copper in the bile itself—that the copper is always accompanied by the colouring matter of the bile—and that the nucleus of the bilious concretions is almost always, more or less, of a yellow colour—Bertozzi holds himself justified in supposing that the presence of copper in the gall-bladder is often the cause of the formation of the nucleus, and that the supply of copper in the organism has, therefore, a connection with the formation of bilious concretions. Heller repeated the experiments, and also confirms the truth of the observation that the coloured gall-stones contain much copper. He recommends a much more simple mode of investigation. By his method the stone is ground to a coarse powder, incinerated in a platina crucible, dissolved in water, acidulated with nitric acid, and the solution is then neutralised. The known reagents will show the presence of copper in this solution. Heller and Baron Gorup-Besanez have lately shown the existence of copper likewise in the bile; the former in the human bile, the latter in that of cattle. Heller is of opinion that, even when the presence of copper is rendered doubtful by extended reaction, its existence is certain when the fixed salts, melted in the platina crucible, take, in cooling, a light blue or blueish-green colour.—*Heller's Archives for Physiol. and Pathol. Chem. and Microscopy.*

On the Flesh of Man and other Vertebrata. By Baron Bibra, M.D.—Singularly enough, Bibra was the first who subjected somewhat of human flesh to chemical investigation. We can, however, give here only a very short report of his analyses, which extend over numerous classes of animals. We shall confine ourselves to the final results at which Bibra has arrived, and we shall first give the qualitative, then the quantitative results. The *fibrin* and *albumen* of the muscular tissue is indentical, in a chemical point of view, with those substances in the blood, bearing the same names, and, treated in like manner, they yield protein. The fibrin and albumen of the flesh always contain phosphate of lime and also phosphate of magnesia, which salts appear (as the gelatine of the bones) to belong to the protein compound itself. From the *gelatine* the quantity of cellular tissue in flesh can only be estimated approximatively, as the muscular fibre is also turned into a gelatinous substance by continued boiling. In general the formation of gelatine takes place under quite peculiar circumstances. Thus, in investigating bones, Bibra found that, after removing the earthy parts of the bones, and washing the cartilaginous substance with water, the cartilaginous substance assumed all the peculiarities of gelatine, in many fossil bones without previous boiling, and after boiling for four hours in those bones which had lain for some time in a peat bog. He says the *extractive matters* are compounds of protein, which partly seemed about to undergo those transformations necessary to form cellular tissue, arterial membrane, muscular fibre, &c., out of protein; partly also consisted of waste material, which, useless in the functions of life, would be thrown out of the system as soon as possible. The similarity which Berzelius discovered between one of these matters and an extractive matter of the urine, is in favour of this opinion. Accordingly, the whole mass of extractive matters in the muscular fibre is in a state of continuous transformation; from which it follows, *à priori*, that the mutual quantitative proportions of these matters must be extremely variable, according to the lessened or increased metamorphosis of the tissues, and that many of them will be different in different animals. Relative to *fatty matter* it is worthy of remark, that although Bibra, before drying the flesh, always removed the fat visible to the naked eye, he often found a considerable quantity of fat in dried flesh. From this, and from the fact that even in the flesh of animals starved to death, some fat is always found, he concludes that a certain quantity of fat is an essential constituent of muscle. Further, Bibra relates respecting a human body cast on shore at high-water, that he found the greater part of it changed into fat (Fourcroy's adipocire), and he holds for certain that a similar change takes place underground, particularly when the air is excluded. Bibra leaves the question undecided, as to whether *lactic acid* exists in flesh. In the fluid of quite recent flesh still retaining the animal heat, he has often found no traces of acid, and sometimes weak, but never strong traces. Almost always the latter was the case when the flesh had lain for some time. From this it appears that a free acid is sometimes present in muscular flesh; Bibra, however, does not know if it be lactic acid, and as little if the acid of fresh flesh be identical with that of flesh kept for some time. The tribasic phosphate of soda forms the chief constituent part of the *ashes*; the chloride of natrium is present in a small, often merely perceptible, quantity, so that it exists in a much larger quantity in ashes of the blood than in flesh. He often found sulphuric and carbonic acids in the salts soluble in water. The alkalies were, invariably for the most part, soda, and a little potash. The salts insoluble in water were phosphates of lime and magnesia; the first preponderated, with a little oxide of iron; sulphate of lime was seldom present. Regarding the phosphates of lime and soda, Bibra is of opinion that, at least in warm-blooded animals, they may be considered as integral organic constituents of the flesh, and the phosphate of soda belongs to the fluids, the phosphate of lime to the muscular fibre. Potash and magnesia are present by substitution. In the case of one and the same individual, Bibra could not discover a determinate reciprocal relationship between the ashes of the blood and of the muscle. We now come to the quantitative results, and we shall first state the numerical composition of *human flesh* as it was obtained from two analyses of the muscul. pect. mag. The first analysis is of the flesh of a man who died of suppuration of a joint; the second of that of a woman who drowned herself, but remained in the water only about a quarter of an hour.

	First.	Second.
Muscular fibre, vessels, nerves ...	16·83	15·54
Cellular tissue changed into gelatine	1·92	2·07
Albumen soluble .... Colouring matter	1·75	1·93
Watery extract with salts ...... Alcoholic extract with salts	2·80	3·71
Fatty matter		2·30
Water		71·45
	100·	100·

In the first subject the ashes weighed, 4·39 per cent.; in the second, 4·480 per cent.; and their composition was as follows:—

	First.	Second.
Alkaline phosphates .... Carbonate of soda	72·95	63·58
Earthy phosphates .... Oxide of iron	15·03	21·12
Chloride of natrium	10·30	13·44
Sulphate of soda	1·72	1·86
	100·	100·

In the *mammalia*, the quantity of water is always from 77 to 78 per cent.; on an average the albumen amounts to 20 per cent.; gelatine to almost as much; muscular fibre to 15 per cent; the quantity of extractive matters is more variable, viz., younger individuals possess less of it than older ones. In the dried flesh of different animals, the residual salts were generally present in much the same quantity, *i. e.*, 5 per cent. Of the different salts, the earthy phosphates appear to preponderate over the alkaline substances in the carnivora. Old *birds* have somewhat less water in their flesh than mammalia, but the same quantity of muscular fibre; young birds have much less muscular fibre. In old birds the quantity of albumen is similar to that of the mammalia, or even greater, and the extractive matters are always present in a larger quantity. In the *reptilia*, the quantity of muscular fibre is less than

in warm-blooded animals; in rana the colouring matter is scanty; coluber has more of it. In *fishes*, the quantity of water is like that of reptiles, and surpasses the quantum of warm-blooded animals, also the quantity of muscular fibre in their flesh is proportionably small. From forty-six investigations, relative to the quantity of fat in the muscle of mammalia and birds, Bibra concludes that in youth the quantity of fat increases by plentiful feeding; in old age it decreases. Carnivora living in a wild state, mammalia, and birds have as much fat as well-fed herbivora. Aquatic birds appear to have more fat than other orders. In conclusion, Bibra communicates some analyses of *pathological formations*. In general they yield like healthy flesh—a protein compound, extractive matters, fat, gelatine, and sometimes even chondrin; also Bibra never found in them any salts save those existing in flesh, but the quantity of the salts was often much greater. Thus, in a fibroid of the under jaw, he found a quantity of salts amounting to 8·33 per cent. (neither chloride of natrium nor iron); in cancer of the præputium, 10·80 per cent.; in cancer of the female breast, 9·30 per cent; in fungus medullaris of the eye, 12·5 per cent. They also contain generally more fat than in healthy flesh. In the fatty tumours, Bibra found that the fat generally consisted of oleine; with the microscope there could not be discovered crystals of cholesterine, and it generally gave no ashes, so that the small quantum of ashes yielded by these tumours originated from the membranous substance remaining from the treatment with ether. This last yields by boiling much gelatine, which is not free from chondrin If this substance is dried in a water bath, and then heated with water, it shows very few traces of extractive matters.—*Roser and Wunderlich, Med. Quarterly Journ.*

Spain.

The following "*Anatomico-Pathological Observations upon Phthisis*," the production of D. José Seco Baldor, a physician attached to the Military Hospitals of Madrid, have been translated from one of the latest numbers of the "*Boletin de Medicina*" in our possession. We regard them as peculiarly valuable and interesting; not only for the pathological facts contained in them, but for the satisfactory views which they exhibit, of the present state of opinion and practice, among the physicians of Spain, on the important subject to which the memoir relates. For the correctness of these opinions, we, of course, do not hold ourselves responsible. We deem it best to give them, without note or comment, to our numerous readers.—P.

Modern writers generally agree in attributing pulmonary phthisis to the development of tubercles in the lungs. Yet some, whose opinion on the subject is entitled to great respect, regard the disease as essentially consisting in chronic inflammation of the organ, and not dependent upon tubercles; which do not invariably exist; and which, when existing, constitute not, in their view, the principal source of the symptoms. An equal diversity of opinion prevails on the origin and nature of tubercle, and its connection with the lesions of the respiratory organs.

To supply data for the solution of these questions, is the principal object of the present memoir. And, although the cases, which it exhibits, are few, the important circumstances, wherein they all concur, may render them useful and interesting to the pathological anatomist.

No one, in the present day, will venture to deny the advantages of auscultation in the diagnosis of thoracic diseases. Yet the value of the stethoscope is not appreciated as it deserves. In Spain, the instrument is very little used, or wholly neglected The following cases, particularly the first and second, are calculated, in the author's view, to inspire greater confidence, among his countrymen, in stethoscopic signs. The six following cases prove that pleurisy may give rise to the formation of tubercles in the pleura, the pseudo-membranes, and parenchyma of the lungs. In the 9th and 10th, the tuberculization obviously resulted from parenchymatous—in the 11th and 12th, from catarrhal, inflammation of the lung. The 13th is a case of hæmoptysis in a subject of phthisical constitution, without the existence of one solitary tubercle in the pulmonary structure; and proves that this hæmorrhage may precede the formation of tubercle; although commonly succeeding it; as in case 14th, and analogous cases, of daily occurrence.

Case 15th affords an example of the development of tubercles in one organ previously inflamed, and, at the same time, in another which had not been attacked by inflammation. In cases 16th and 17th, the inflammation, as almost always happens, had not been antecedent, but consecutive. The 18th is a singular case of tubercular diathesis. In this, tubercles were discovered, not only in the parenchymatous structure of several organs, but also in the blood which had been drawn from the patient.

Lastly, the 19th is a case in which the patient, after having exhibited all the characteristic signs of phthisis, perfectly and most unexpectedly recovered. Here, however, the existence of tubercles may be doubted. It is probable that the cavern, discovered in the left lung was the result of common, not of tuberculous suppuration.

On the whole, it may be inferred from these cases, 1. That tuberculization is frequently preceded by inflammation, as the occasional cause, of the part in which the tubercles are developed: 2. That tubercles, once developed, operate, after a time, as extraneous bodies, and either excite consecutive inflammation, or aggravate that already existing: 3. That the general tubercular diathesis apparently consists in a peculiar state of the blood, sufficient, of itself, for the formation of tubercles in the various organs, independently of irritation of any grade or species: 4. That phthisis is curable: and 5. That all the characteristic symptoms of this disease may occasionally be developed, without the existence of tubercles in the lungs. At the same time, these cases may serve to illustrate some important points in pathological anatomy and semeiotics.

CASE 1.—*Chronic Pleuro-pneumonia; Pulmonary Tubercles; Caverns opening into the left Cavity of the Thorax; Mucous and Cavernous Râle; Amphoric Sound.*

A man, of weakly constitution, aged twenty-one, was, at the close of April, 1836, admitted into the Military Hospital of Lavapies. The various gastric symptoms, of which he complained, were attributed, by him, to the repugnance with which he invariably ate his mess; and disappeared after a few days' residence in the hospital. He had, moreover, dyspnœa, frequent cough, muco-purulent expectoration, and fever. There was no hæmoptysis; but slight and wandering pains in the breast. He was pale, emaciated, and feeble.

May 8th.—The following symptoms were found upon minute examination, cough frequent and troublesome; expectoration difficult, scanty, consisting of a muco-purulent, thick fluid, for the most part, of a yellowish-white colour, but mixed with some portions of a pinkish-grey, and sanious; dyspnœa considerable; reclination supine; wandering pains in the whole chest; respiration sibilous over all the right side of this cavity, mucous in both lateral regions, but more so in the left than in the right, and in the posterior regions of each side, than in the others The respiratory murmur more or less obscured by râle, and, in some points, extinct. The sound of the thoracic parietes dull in the whole of the left side, except the anterior superior portion, and more so in the inferior regions than in the others; diminished, but not wholly dull, on the right side. The skin hot, dry, and earthy. Pulse very quick and small; night-perspirations, especially from the middle of the body, upwards. Sleep interrupted by cough. Appetite impaired. thirst natural. Emaciation: extreme debility

From 8th to 16th.—State of the patient daily worse. Mucous *râle* audible at a considerable distance, and evidently cavernous. Every evening, an access of fever, followed by more profuse night-sweats.

16th.—In addition to the *râle*, distinct amphoric sound in the left posterior and lateral regions.

17th and 18th.—This sound equally audible, especially on coughing. Dyspnœa extreme: expectoration well-nigh suppressed. Death on the 19th of May.

NECROTOMY TWELVE HOURS AFTER DEATH.

Thorax.—Left cavity containing a pint of purulent serum. Corresponding lung strongly adherent to the ribs, pericardium and diaphragm, by cellulo-fibrous bands and false membranes. The adhesion to the diaphragm was merely by the anterior and posterior extremities of the base of the lung; which, however, adhered to the ribs in its whole external surface and the adhesion formed an oblique line from the posterior part of the vertex to the anterior of the base. The fluid, occupying principally the inferior part of the cavity, passed to the superior, behind the lung. The costal and diaphragmatic pleura was red, thickened, indurated, opaque, and, in many places, covered with thick and membraniform pus. Pulmonary pleura thickened, opaque, indurated, whitish, and fibrous, but less so in the middle third of its anterior portion than elsewhere. All the parenchyma of the lung, except the anterior border of the superior lobe, condensed, and full of tubercles and caverns, especially at the posterior part. In the centre of the superior lobe, near its posterior border, two orifices, of the diameter of a writing-quill: in these, some of the bronchial tubes and caverns terminated, and, through them, communicated with the cavity of the pleura. The right lung adherent to the ribs and pericardium; but unattached at the base: the lobes adhering together; and their parenchyma condensed, but in a smaller degree and extent than the left; and the tubercles and caverns less numerous than in that. The costal pleura red in its posterior portion: the pulmonary, fibrous in divers points, and of a red and whitish colour The caverns, in both lungs, filled with a muco-purulent matter in some instances, it was sanious, or composed of pus and blood. In the pericardium, a quantity of transparent yellow serum. Heart small.

Abdomen.—Peritoneum opaque, whitish, and full of serum resembling that of the pericardium. The omenta converted into a cellulo-fibrous membrane, and perfectly destitute of their peculiar adipose appearance. Stomach adherent to the colon, spleen, liver, and diaphragm. The whole mucous membrane of a pink colour.

REFLECTION

On the admission of this patient into the hospital, he presented various symptoms of gastric irritation. But the principal cause of the fever and emaciation evidently resided in the thorax. The exploration, of the 8th of May, shewed, beyond a doubt, that the man was in the last stage of tubercular phthisis, complicated with chronic inflammation of the pleuræ, of the parenchymatous structure of the lungs, and the bronchial mucous membrane.

On the 16th, was discovered, in the left side, the amphoric sound—*Bourdonnement amphorique de Laennec*—and this sign was clearly diagnostic of the existence of one or more caverns opening into the cavity of the pleura, and of the penetration of the atmospheric air to the purulent fluid which it contained. Thus were the opinions founded, during life, on the results of percussion and auscultation, admirably verified by dissection. In fact, both pleuræ, and more particularly the left, exhibited unequivocal vestiges of chronic inflammation; and the effusion of pus satisfactorily accounted for the obtuse sound of the greater portion of the left side, the absence of the respiratory murmur, and, above all, the amphoric sound Lastly, the parenchymatous inflammation, which, doubtless, contributed to the diminution, or absence, of the respiratory murmur, and of the normal sound of the thoracic parietes, was, also, discovered.

This case suffices, of itself, to demonstrate the value of percussion and auscultation in the diagnosis of the various lesions of the respiratory organs; and to prove that, by them only, can be detected the existence of certain lesions, as, for instance, the penetration of caverns into the pleura, and the consequent introduction of atmospheric air into its cavity This assertion is not advanced with the view of depreciating the value of other diagnostic signs; without the aid of which percussion and auscultation will be almost always insufficient

According to Laennec, the thickening of the pleura, when inflamed, is not real but apparent, and owing to the formation of several layers of false membrane, which adhere together, and are still capable of being separated by cautious dissection.

That this takes place in many instances, cannot be denied; but, in the present case, and in many others which might be cited, such separation was absolutely impossible; for the pleura was permanently thickened and converted, like the peritoneum and omenta, into a fibrous membrane. It seems strange that Laennec, while admitting the fact of the transformation of the various textures, one into the other, either by the normal progress of organization, or in consequence of alterations in the process of nutrition, admits not the possibility that an inflamed serous may pass into the class of fibrous or other membranes. Nothing, moreover, tends to prove that the pseudo membranous layers adhere so intimately together, and to the pleura, as to constitute one single membrane, of the fibrous or other class.

CASE 2.—*Chronic Pleuro-pneumony of both Sides; Pulmonary Caverns opening into the left Pleura; Mucous and Cavernous Râle; Amphoric Sound.*

On the 1st of June, 1836, a man was admitted into the Military Hospital of Lavapies. He had been ill, from his own report, two months, but apparently, much longer. He was pallid, emaciated, and very feeble. He had considerable fever, great difficulty of inspiration, frequent cough, with muco-purulent expectoration, extreme sensibility of the whole body, more particularly of the thoracic parietes, and over the whole left side; and colliquative sweats. The respiratory murmur was extinct, or scarcely audible, in both sides of the thorax. In the whole right side, there was mucous *râle*, so distinct in the superior half as to merit the designation of cavernous. This *râle* also existed, in a slighter degree, in all the left side, except the inferior half of the lateral and posterior regions. The amphoric sound was, moreover, perceptible in these regions; pure in the inferior half, but mixed with the mucous *râle*, in the superior portion. The sound of the thoracic parietes was generally obtuse; but percussion was so painful, especially on both sides, that little use could be made of it. Great accession of fever was observed on the evening-visit. Death during the night.

NECROTOMY THIRTEEN HOURS AFTER DEATH.

Thorax.—More than half a pint of purulent serum in the left pleura; which was inflamed, thickened, and opaque, especially the pulmonary portion. The whole left lung condensed, impervious to the air, and adherent, by its vertex, base, and internal surface, to the contiguous parts. In the superior half of the posterior portion, caverns opening into the pleura, and communicating with the bronchial ramifications. White tubercles, variable in their consistence, discovered in all parts. Right pleura containing purulent serum, and exhibiting traces of inflammation more slight than in the left. Lung partly pervious to the air, some small caverns. Tubercles less abundant in the condensed portion: none in the sound part. This lung adhered to one of the intercostal spaces; with that exception, both were separate from the ribs. Much purulent mucus in the bronchia and their ramifications.

REFLECTIONS.

In this, as in the preceding case, the existence of a cavern opening into the left pleura, and the admission of the air into its cavity, was clearly indicated by the amphoric sound. As this sound supposes the presence of a certain quantity of fluid on which the air strikes upon its entrance, and, as there had been pains in the thorax, and other signs of pleuritis, the existence of empyema, in addition to the pneumo-thorax, could not be doubted.

The mucous and the cavernous *râle* accurately coincided with the existence of caverns in both lungs, and of the muco-purulent secretion in the whole, or greater part, of the bronchial tubes. It is worthy of remark that, in both cases, these sounds were combined, without any difference save that of strength. The same has been observed in many other cases; and the author concurs in the opinion of Andral, that the cavernous, the mucous or bronchial, as well as the crepitous *râle*, are merely degrees of the same sound, and dependent on the situation or cavity in which they are produced, and the quantity of fluid which it contains.

(To be continued.)

England.

(The following are the only articles of interest in the last two numbers of the *Medical Gazette*.)

POST-MORTEM HEMORRHAGE.—Mr. A. S. Taylor, in his lectures on medical jurisprudence, remarking on post-mortem hemorrhage, says, its occurrence formerly gave rise to the most superstitious notions, and even in the present day it often induces a coroner's jury to suspect that homicide has been committed. In order to explain this, and some other apparently vital phenomena connected with the dead body, reference must be made to those spontaneous changes which commence soon after death. When a person has died suddenly from violence or disease, it often happens that, within a short period afterwards, the whole of the cavities, including the veins, arteries, and cellular tissue, become distended and emphysematous, from the considerable extrication of gas which ensues. The gas collected in the abdomen pushes back the diaphragm, in consequence of which mucus issues from the mouth and nostrils, the face becomes swollen, the eyes bright and prominent, and the pupils contracted, owing to the blood having been forced back to the head and neck by the emphysematous state of the abdomen and viscera. It is owing to this cause that the contents of the stomach are sometimes discharged, escaping into the trachea, or externally by the mouth. That which, however, more immediately concerns us at the present time, is the development of these gases within the heart and vascular system, in consequence of which blood is forced out of a wound made in a vessel before death, long after the phenomena of life have ceased. When an attempt has been made to bleed a person immediately before death without success, and the operator has neglected to secure the opening, it frequently happens that, some hours after death, a large quantity of blood escapes by the wound—conveying to those who are uninformed on these matters the idea that the person had again come to life, but had died from the bleeding. An accident of this kind gave rise to considerable discussion on the occasion of the inquest held at Oldham, on the body of John Lees, killed in the Manchester riots, as also in the case of the Crown Prince of Sweden, who was suspected to have been poisoned. A similar flow of blood may take place from a large incised wound, made recently before death. This post-mortem hemorrhage is facilitated by pressure, and hence arose the ancient test of guilt, viz., the touch of the murderer.

PARACENTESIS THORACIS.—Dr. Hughes narrates a case of pneumo-thorax following an injury to the side, apparently unattended by fracture, in which pleuritic effusion supervened. Calomel and opium were exhibited internally until the mouth became sore, and the side was blistered, but without advantage. In consequence of the supposed injury to the lung itself, it was thought desirable not to draw off the fluid, but for a time to leave the case to nature, and to keep up the general health. The patient was allowed to get up and go into the air, and to take meat and porter. Blisters were occasionally applied to the side, and he took the iodide of potassium and liq. potassæ in bitter infusion twice or three times a-day. After this plan of treatment had been continued for a month, the chest was found to present the following signs:—The left side measured three-quarters of an inch more than the right, was scarcely at all raised during inspiration, was dull upon percussion, as high as the nipple before, and over the whole of its posterior surface. There was no separation or filling up of the intercostal spaces perceptible, as although very considerably reduced in flesh, he was still in good condition. The respiration was absent or distant, the voice was indistinct, and tactile vibration was absent inferiorly. The respiration was puerile below the clavicle, and bronchial with bronchophonic voice in the left interscapular region. The heart was heard and felt most distinctly on the right side of the sternum. No metallic ringing of the breathing, or of the voice, or cough, could be distinguished; the splashing of fluid was still audible, though it was much less loud than formerly, and gave the impression to the ear of a cavity nearly full. He usually lay upon his back, with the shoulders slightly raised, but could lie upon either side without inconvenience. The breathing was not hurried, excepting when he exerted himself. Paracentesis thoracis was then performed, and fifty ounces of turbid sero-purulent fluid were removed in a full stream, without the admission of air, or any act of coughing, but with the effect of causing slight temporary faintness. It was then thought desirable to stay the stream, and to allow the lung time gradually to expand. Plaster and a bandage were applied as usual, and he was desired to keep his bed, and to refrain as much as possible from talking for twenty-four hours. The next day he felt no inconvenience from the operation, but was relieved, and felt lighter, and the heart was removed from the right side to the posterior surface of the sternum. The pulse numbered 96, and the respirations 28. The operation was repeated on two succeeding occasions, after which he was so much improved, that he was allowed to go out of the hospital on leave. He did not return. Another case of pleuritic effusion is described by Dr. Hughes. The patient had been under treatment in the hospital about four months previously for pleuritic effusion of the right side, and had been discharged in three weeks free from complaint, with the exception of some remaining dulness and pleuritic creaking posteriorly. On his readmission the face was flushed, and the skin rather hot; the tongue loaded, but moist; the pulse 112, small, and feeble; the respirations 32; he had no pain when quiet, but the act of coughing, which was frequent, and accompanied with a scanty mucous expectoration, was attended with pain of the left side. He was able to lie flat in bed, and to turn to either side without inconvenience. Upon inspection of the chest the left side appeared evidently more rounded and fuller than the right; the ribs were imperfectly elevated during inspiration, and the intercostal spaces were almost upon a level with the ribs, so as to present nearly an even surface; they also afforded a sense of vibration rather than of fluctuation to the finger when the parietes were struck. The left side was dull upon percussion as high as the third rib, and to the centre of the sternum anteriorly, and over the entire posterior surface. Tubular breathing, increased shrillness, not loudness of the voice, and a decrease, not an entire absence, of tactile vibration, were observed in the greater portion of the dull expanse. But hoarse and puerile respiration was audible, and tolerable resonance upon percussion could be elicited in the infra-clavicular and acromial regions. The impulse of the heart could be felt on the left side, close to the sternum, but it could also be felt at least as distinctly on the right of the sternum, and much more distinctly at the scrobiculus cordis; its sounds and rhythm appeared to be natural; the comparative size of the two sides was not ascertained. With the exception of some bronchial rattles, the right side appeared to be natural; the posterior dulness which existed when he left the hospital had disappeared. He was bled and blistered, and mercury freely employed until salivation was induced, but ineffectually. There existed no evidence of the decrease of the effusion; on the contrary, there appeared to be direct evidence of its increase. The dulness existed up to the very clavicle; the heart's impulse was distinctly felt between the fourth and fifth ribs on the right side, and was barely perceptible on the left side of the sternum; and though the breathing was not more hurried, the countenance was depressed, pale, and of a leaden hue, and the expression was anxious; the tongue was loaded from the action of the mercury; and the pulse was feeble, frequent, and compressible. It was, therefore, thought desirable to draw off some of the fluid, so as to secure the future expansibility of the lung, if he should recover, but of which there appeared to be some doubt, as his case presented considerable danger. The exploring needle was accordingly introduced by Mr. Cock, and the presence of an abundance of serous fluid having been ascertained, a small trochar was passed into the chest, and forty ounces of clear dark-coloured serum were withdrawn. He was rather agitated by the operation, and coughed considerably while the fluid was being drawn off. During the forced expiration following the cough, there was a tendency for the air to enter the chest. The canula was consequently removed, though much more fluid might under other circum-

stances have been obtained without the admission of any air. He did not say that he felt relieved by the operation. Some improvement followed, and the use of mercury was persisted in. The effusion not decreasing, the operation was repeated, and thirty ounces of clear dark-coloured serum removed. It formed a transparent gelatinous coagulum upon cooling, became semi-solid upon being heated, and was of specific gravity 1030. Two days afterwards the bandage was removed; the entire anterior surface of the left side of the chest was resonant, and a portion of the lower part was tympanitic upon percussion (probably from the stomach); pleuritic rubbing was heard in the infra-clavicular and mammary regions, and a thrill from surrounding vibration, rather than the direct impulse of the heart, was perceived upon the right of the sternum, though the impulse was scarcely more distinct upon the left side. The posterior part of the lateral and axillary, and the whole of the posterior regions, were still dull upon percussion, whether he sat up in bed or lay on his stomach; no pleuritic rubbing was heard posteriorly, and but little tactile vibration was there observed, though the respiratory murmur was indistinctly heard over the greater part of the side. After this no further effusion took place and the man gradually improved, so as to be nearly recovered at the date of the report.

SCIATICA.—A case of sciatica is reported from University College Hospital, which was cured by blistering, and the endermic application of the hydrochlorate of morphia.

TUMOUR IN THE CHEST.—Mr. C. Taylor attended a lady, fifty years of age, who complained principally of symptoms referable to the digestive organs, and of dyspnœa. She could lie on either side, but most easily on the back; cough slight, and no expectoration; countenance turgid, hands cold, fingers blueish, pulse 100, and feeble. On physical examination, the right side of the chest was prominent and rounded, distinctly larger than the left, but without intercostal fulness; it was as dull as a board; posteriorly, no respiratory murmur was audible, but there was bronchial respiration to a limited extent between the scapula and spine. Voice modified, distant, and shrill. The left side posteriorly was preternaturally clear; respiratory mur mur puerile; the voice normal. Right side anteriorly was dull; no respiratory murmur through out; on the left side the voice was normal. The heart's sounds were regular and weak, but heard on the right side of the chest before and behind. Veins of the neck full; some whitish gelatinous matter was expectorated. It was regarded as a case of empyema, or extraneous growth in the pleura; and, on account of the patient's feeble state, ammonia and mild nourishment were allowed. The general distress and dyspnœa continued to increase, and the patient lay on her left rather than on her right side. No cough or expectoration present; drowsiness and delirium supervened, with slight œdema of the feet; the urine was albuminous on boiling. She sunk rapidly. The post-mortem examination was made fifteen hours after death. On introducing a trochar between the seventh and eighth ribs, below the angle of the scapula of the enlarged side, only a drop or two of clear fluid escaped, and when a probe was passed it came in contact with a hard and rather elastic substance. On withdrawal of the canula, more serous fluid escaped. On opening the chest, the right pleura was found to contain upwards of four pints of straw-coloured serous fluid; the lung, compressed upwards, did not exceed the size of one normal lobe, and was destitute of air; there were no tubercles. Below the lung, and occupying the chief part of this side of the chest, was a round smooth tumour, rather larger than a fœtal head, having the pleura reflected over it, connected with the right side of the bodies of the seventh and eighth dorsal vertebræ by an almost cartilaginous neck; but it was uncertain whether it originated from the bony substance of the vertebræ or the intervertebral substance; some old bands connected the pleura covering it, and the lung had recent bands of lymph connecting it with the upper part of the chest. The left lung was crepitant, but congested and œdematous. Heart small and atrophied. Pericardium and valves healthy. The liver, which was thrust down, was puckered, but otherwise healthy. Kidneys enlarged. The uterus had three or four tumours connected with it. The tumour weighed two pounds and three quarters; it was generally hard and firm in structure, but was softened down in the centre, containing a cavity with softened walls; externally it was of cartilaginous hardness. Dr. Gull had since examined its structure by the microscope, and found that the opaque white spots it its centre were apparently fat cells, becoming soluble on the addition of ether, which, on evaporation, yielded up fatty matter. In the more solid portion of the tumour similar cells (fat cells?) existed conjointly with a number of nucleated cells (malignant?). The structure of the uterine tumours was different, the cells being more simple, and no fat cells being anywhere discoverable.

CONGENITAL ABSENCE OF THE CORPUS CALLOSUM.—Dr. Ogier Ward describes a case in which there was congenital absence of the corpus callosum in a male illegitimate child, which survived about eleven months. It was subject to convulsions from birth, and although it could hear and see, gave no signs of intelligence. The brain was about five inches long by three and a half wide, and two and a half inches thick; it was not vascular, but was firmer than natural. The lateral ventricles were distended by about an ounce and a half of serum, which ran out on attempting to raise the cerebrum. The nerves were all perfect. The cortical portion was very superficial, and separable from the medullary part, apparently from the absence of convolutions to dovetail them together. The cerebellum was equally deficient in cortical matter. When the brain was taken out and laid upon the table, the two hemispheres fell asunder, even the tuber annulare splitting into two equal portions, the decussation of the optic nerves being the sole connection of the two sides of the cerebrum. The central portions of the brain were so rudimentary as scarcely to be distinguished. The whole contents of the skull did not weigh more than a quarter of a pound.

DISSECTING ANEURISM OF THE AORTA.—Dr. T. Thompson records a case of this rare disease, occurring in a gentleman, forty-five years of age, who had been previously subject to occasional attacks of rheumatism. Dr. Thompson was called in, in consequence of his suffering from severe pain in the abdomen, accompanied by bilious vomiting. The pain, although somewhat lessened, continued still severe the next day, in the early part of which he was seized with syncope, for the removal of which powerful stimuli were administered, and their use persisted in. Evidence of internal hemorrhage afterwards presented, and he died on the fourth day. The body was examined twenty-four hours after death. On opening the chest, attention was directed to the distended state of the pericardium, which contained about six ounces of blood, part of which was fluid, but a portion formed a layer of coagulum, enclosing the heart. A considerable projection of the cellular sheath of the aorta compressed the left pulmonary artery in the first inch of its course, and gave its aperture the appearance of a narrow chink. The coronary arteries were dilated and rigid, more especially the right one, which, about an inch from its origin, was about six-tenths (·65) of an inch in circumference. This rigidity was owing to atheromatous deposit, which, on tracing the artery from its commencement, became more and more conspicuous. The enlargement about the aorta was found to have been occasioned by the escape of blood into the cellular envelope of that vessel. There was no rent of the part adjoining the pericardium, but, judging from the situation of the principal ecchymosis and discoloration, it was sufficiently evident that the blood had escaped into the pericardium, between the pulmonary artery and the appendix of the left auricle. On cutting into the aorta, a rent about eight-tenths (·85) of an inch in extent was observable, passing through the internal and part of the middle coat of that vessel, half an inch above the free border of its posterior valve, at first nearly perpendicular to the valve, then for about three lines diverging to the left side, so as to assume a form like that of the clavicle. The lining membrane of the aorta was easily lacerable, and in many parts, especially near the arch, studded and tuberculated with atheromatous deposit; but there was no deposition or ulceration near the rupture. The edges of the laceration were ragged, and, when separated, disclosed coagulated blood, included between the layers of the middle coat of the artery, the transverse fibres of which were readily distinguishable. This separation of the laminæ existed entirely around the aorta at its commencement, and, extending upwards, surrounded one half of the arch behind the arterial trunks, afterwards nearly encompassing the vessel, excepting at the origin of the intercostal arteries, the inner and middle coats of some of which had indeed been entirely torn from their attachment to those of the aorta by the force of the intruding current of blood. The same current, proceeding by the outer and anterior side of the arteria innominata, encircled two-thirds of the right carotid artery as far as within an inch of its division into the external and internal branches. A similar separation extended along the posterior and left walls of the whole thoracic aorta, between the layers of the middle coat, and the effused blood could be traced downwards between the corresponding layers of the posterior wall of the vessel in its abnormal portion as far as the origin of the renal arteries. The heart was considerably enlarged and thickened, chiefly in consequence of hypertrophy of the left ventricle, the wall of which, on a level with the free margin of the aortic valves, was eight-tenths of an inch, and at the distance of an inch from the apex two-tenths (·23) of an inch in thickness; but its substance was deficient in firmness and colour, having the appearance of a weakened muscle. The valves of the heart and aorta were healthy, those of the pulmonary artery delicate and cribriform. There was no special or partial dilatation of the aorta; but this vessel was of considerable calibre, its circumference above the rupture measuring exactly four inches, whilst that of the pulmonary artery, near the valves, was only three inches and two-tenths. The abdominal viscera were healthy, with the exception of the kidneys, which presented in their substance a few indistinct granulations, and on their surface some cicatrices, as though from former scrofulous disease.

SILEX IN AN URINARY CALCULUS.—Dr. Venables describes the chemical analysis of a portion of an urinary concretion extracted from the male urethra, in which he found silex combined with the earthy phosphates. From his remarks, it appears that the presence of silex in such concretions is rare. He seems to refer its origin in such cases to its presence in many articles of food.

GALLATE OF LEAD AND POTASH.—Mr. Ollby has found that, on precipitating the base of either the acetate or nitrate of lead by a solution of potassa, and afterwards adding a few drops of saturated solution of gallic acid to the fluid, the oxide thrown down almost immediately assumed a pink hue, which, by the absorption of oxygen from the air, speedily became crimson, the latter colour being remarkably deep and shining. This crimson compound is perfectly soluble in an excess of the alkali, though the clear solution is not, as might be supposed, of so rich a tint as the solid precipitate: but, like the latter, its colour is rapidly heightened on exposure to the atmosphere. The same changes are produced by throwing down the oxide of lead from either of the above-mentioned salts by ammonia; but the colours are, in this case, less bright and more fugitive than when potassa is employed as a precipitant, the latter circumstance being probably attributable to the volatility of the former alkali. Soda gives rise to effects precisely similar to those produced by the employment of either potassa or ammonia. These coloured compounds are readily decomposed by nitric, hydrochloric, and other strong acids, and they are also destroyed by a very slight elevation of temperature, as well as by exposure for a few hours to the atmosphere; when, however, they have been deprived of colour by the action of an acid, the colour may be, in a great degree, restored, by adding more of the alkaline solution to the fluid so as to neutralise the acid. Mr. Ollby, from these curious results, suggests the joint employment of gallic acid and an alkali as a test for lead.

[The following are the only articles of interest to the profession in the last No of the *Lancet*.]

POISONING BY LEAD.—Dr. J. H. Bennett details the results of numerous cases of colica pictonum and lead palsy, which he saw treated by M. Gendrin by the internal administration of sulphuric acid, and which were nearly uniformly successful. As an useful test of the freedom of the system from the lead, and also as an adjuvant of the treatment, he advises the sulphur bath, and says no one should be considered safe until he has gone through the ordeal of that bath, with a perfectly white skin.

DISLOCATION OF THE LOWER JAW.—Mr. Levison recommends the use of the following apparatus in persons subject to luxation of the lower jaw. A flat band, composed of four layers of wash-leather, is accurately measured to the under part of the chin, with a cap to fix on the latter exactly, and so shaped as not to press on the trachea; and then it is neatly bound with ribbon. At one extremity there is a neat small buckle, not sown on the edge of the band, but on the flat side, the corresponding extremity having a neat doeskin strap, by which it is fastened at the top of the head, after being placed on the chin. This contrivance may be worn with security and ease. But as a preventive against the instrument being forced off during sleep, two pieces of ribbon or strong tape are sown on it at each side, exactly under the ears, and then they are tied behind just under the occipital process.

POISONING BY LIQUOR AMMONIÆ.—Mr. Williams describes a case of poisoning by liquor ammoniæ, which terminated favourably. The quantity taken was not known.

ABSCESS OF THE BRAIN.—Mr. Hancock states that he was called to a young female labouring under a disease of the ear. He found her complaining of intense agony in the right ear and side of the head, so severe that she was obliged to support her head by both her hands, her elbows resting on the table. He was informed that she had been subject to discharge from that ear, at intervals, ever since she was two years of age; but that she had been free from that annoyance for some few weeks. As she complained very much of pain in her teeth on that side, he was induced to examine her mouth, and found one of her teeth so much diseased, that he advised its instant removal, which was subsequently effected, with relief as to the pain in her mouth. He carefully endeavoured to ascertain whether there were any symptoms of disease of the brain, but could not discover any beyond the pain and sensation of weight in the head. She was perfectly sensible, could converse with her friends, and answered any questions put to her with the greatest readiness. Neither her arms nor lower extremities were affected; both sides of her face were natural, and she had perfect control over the sphincter muscles up to the period of her death. On the second day she complained so much of throbbing in the ear, that he was induced to introduce a probe to ascertain the state of the parts, and passed it nearly two inches into the organ without meeting with any obstacle. However, shortly after he left, he was informed that she felt something yield, which sensation was followed by a copious discharge of matter from the ear to the extent, as the friends informed him of nearly two ounces, with decided relief. He saw her three times a-day until her death; and he observed, that although he carefully watched for any symptom of paralysis, he could not detect any, even at his last visit, about three hours before she died. On the next day but one he examined the body. On removing the brain, he found, corresponding to the petrous portion of the temporal bone, an ulcer of the dura mater about the size of a sixpence, this ulcer being evidently produced by some sharp processes of bone growing out from the petrous portion, the condition of which appeared to be perfectly healthy. Upon cutting into the right hemisphere of the cerebrum, he discovered a very large abscess, implicating nearly the whole of the middle, and extending into the anterior and posterior lobes of that hemisphere, the abscess being contained in a very tough and thickened cyst. There was no communication between the cerebral abscess and the internal ear, the petrous portion, as he had observed, remaining to all appearance healthy. He next examined the internal ear, but could discover no signs of abscess in that situation; the lining membrane was thickened, but there was no trace of any collection of matter having been found within that cavity.

SERO-CYSTIC SARCOMA OF THE MAMMARY GLAND.—A case of this disease is reported from the practice of Mr. Lawrence, at St. Bartholomew's Hospital. The patient was a female, thirty-six years of age, and a mother. The tumour seemed to have been the sequence of a mammary abscess, and to have been of considerable duration. About a year prior to her admission into the hospital, a black spot appeared on its surface, which increased in size, and was lanced, when some dark-coloured fluid, like coffee, was discharged. Some time after this the integuments sloughed, and the disease became fungous. When admitted a reddish fungous mass, with narrow base, the size of the two fists, of tolerably firm consistence, and moveable upon subjacent parts, protruded from the lower part of the right breast. The surface, whence issued a sparing but thin and offensive discharge, bled readily when touched, and was occupied here and there by shreds of sloughy tissue and small coagula; towards the circumference it was cicatrised in parts with the integuments; the surrounding tissues were but slightly indurated; the nipple, in its natural situation, and above the tumour, was surrounded by a dark-coloured areola, and more prominent than natural. She suffered occasional darting pains, but the tumour was chiefly distressing from its weight, size, and tender surface. The diseased growth was removed by operation, and the wound thus made cicatrised readily. Upon making a vertical section, it was found composed of yellowish masses of firm homogeneous structure, amongst which were interspersed cysts of various sizes, containing serous fluid. The disease extended to the pectoral muscles, fibres of which, in immediate contact with the tumour, were firmer and whiter than natural, but not otherwise altered in character. About a year afterwards another tumour of a similar nature was removed from the right breast, and the patient did well afterwards, and left the hospital apparently cured. Mr. Holmes Coote, by whom the case is reported, observes that sero-cystic sarcoma, commonly regarded as a non-malignant affection, commences, according to Sir B. Brodie, by a dilatation of some of the lactiferous tubes. One or more cysts, containing a clear serous fluid, which, by pressure, may be made to escape by the nipple, are imbedded in the healthy glandular structure. The disease, which may attack both breasts simultaneously, is not attended with pain, advances slowly, and does not affect the absorbent glands. In this case twelve years elapsed between the first appearance of the tumour and the perfor mance of the operation; the patient, rather inclined to embonpoint, had enjoyed good health during the whole period. Next, firm solid matter deposited upon the exterior of the cysts, binds them together in a mass, and destroys their globular form. The contained fluid assumes a brownish or blackish hue, probably from admixture of altered blood-discs. At some point a cyst, larger than the rest, manifests itself externally as an elastic tumour, over which the integuments, if not divided by the knife, slough, and allow the escape of the fluid coffee-coloured contents. An albuminous or fibrous growth is formed upon the inner surface of the cavities, covered by a delicate membrane, rapidly becomes organised, and shoots forth as a vascular bleeding mass. The discharge, in the present case, was offensive in smell. The occasional bleedings, the size, weight, and tender surface of the tumour, are the chief circumstances which induce patients to submit to the operation of extirpation. Nature, however, makes some attempts at reparation. The cyst may burst, and heal, and burst again, and even when the fungous growth has protruded, granulations may arise, and cicatrisation may connect it in parts with the surrounding integuments. With reference to the relapse in this case, Mr. Lawrence stated that in private practice he had removed the mammary gland for simple hypertrophy, the operation being followed in a few months by the formation of a sero-cystic sarcoma, the extirpation of which was succeeded by genuine medullary cancer.*** The case under notice gives every reason to believe that it was malignant, and will ultimately be attended with a fatal issue. The second operation was uncalled for.

TRAUMATIC TETANUS.—Mr. Page describes a case of traumatic tetanus, following a gunshot wound of the left arm, in which he exhibited aconite with success. The symptoms of tetanus did not show themselves until three weeks after the injury, which was very severe, had been received. The aconite was given in the form of tincture, prepared by Dr. Fleming, three minims being the commencing dose, and it was used on account of its known influence in destroying muscular irritability, and its powerful sedative effects on the nervous and vascular systems. The quantity administered was afterwards raised to four and five minims, and with evident benefit, but the peculiar toxic effects of the remedy were produced, and, on the third day after the patient had taken twenty-seven minims in seven hours, he was found at 6, p.m. in the following state:—There was entire relaxation of the muscles, accompanied by extreme prostration, so that he was unable to move his limbs, and he could scarcely make himself audible; the skin was pale and cold, and covered with a clammy perspiration; the pulse very slow, extremely intermittent and irregular; the pupil was dilated and insensible, and the vertigo and confusion of ideas were great. To these symptoms was added the most extreme irritability, the slightest impression on the senses producing an effect similar to that which is observed in hydrophobic patients. The least noise, the moving of persons in the room, the opening of the door, the act of swallowing the saliva, severally induced a severe fit of convulsive shuddering. It was evident that the aconite had been continued to the fullest extent consisted with safety. The exhibition of a rather large dose of laudanum in mulled wine removed these symptoms, and the tetanus being still present the next day, though in diminished force, the aconite was resumed, with the addition of as much wine and nutriment as the patient could take. The next day the combination of opium with aconite was required, on account of excessive muscular irritability. The day after, the effects of the aconite becoming again evident, especially in the pulse, it was omitted, and opium, with sal volatile, alone given. It was afterwards resumed, and the disease gradually wore itself out.

Scotland.

LIGATURE OF THE SUBCLAVIAN ARTERY.—Dr. Mackenzie, in the *Northern Journal of Medicine*, details an interesting case of lesion of the axillary artery by burning, in which, after repeated hemorrhages, he applied a ligature to the subclavian artery with success. The patient was a married man, thirty-five years of age, of temperate habits, and the injury resulted from a fall while holding a red-hot poker in the left hand. In trying to save himself, he stretched out the left hand, which bringing the butt end of the poker to the angle of the room, where the wainscot and floor met, he fell with his whole weight on the red-hot point, which entered the right axilla, immediately behind the tendon of the pectoralis major. The poker was instantly withdrawn from the deep scorched wound, from which a few drops of blood escaped. Eight days afterwards a large eschar separated, and was followed by a sudden and copious gush of blood, which was arrested by tenting the wound. When seen by Dr. Mackenzie the day after, the surface of the wound, which was situated in the axilla, immediately to the inner side of the biceps, and behind the tendon of the great pectoral muscle, was about two inches in length and an inch in breadth, was covered with a grey-slough, and secreting a thin watery discharge. The skin in its neighbourhood was of a dark-red colour, and there was considerable hardness and infiltration around the shoulder and upper half of the arm. The hemorrhage recurred from time to time, and was more or less profuse, while the compression which was constantly used to repress it, was evidently doing mischief. By Mr. Syme's advice, therefore, the subclavian artery was ligatured, and it was further determined that if the operation failed to arrest the loss of blood, amputation at the shoulder-joint should be had recourse to. It was feared that it might be ineffectual on account of the free anasto-

mosis existing between the branches of the axillary and subclavian arteries. It proved, however, fully adequate for the purpose for which it was de signed; the ligature came away on the twentieth day, and the patient ultimately recovered. The only annoying symptom that followed the operation, was a slight pricking pain in the ulnar side of the wrist and hand, which, however, gradually diminished, and at the date of the report was very trifling. Dr. Mackenzie remarks on this interesting case that the untoward symptoms, which were to be apprehended after the application of the ligature, were gangrene of the limb, or a renewal of the bleeding from the wounded vessel, under either of which circumstances amputation must have been performed. The swollen and infiltrated state of the arm, with the feeling of cold and numbness of the hand, were conditions by no means promising for the vitality of a limb, in which the supply of blood was to be cut off from its main arterial trunk. The pressure of the compress upon the vessels and nerves of the axilla could not have been much longer continued without producing mortification of the limb; and the possibility of diminishing with safety, or altogether removing this pressure, after the application of the ligature, appeared to render the risk of gangrene much smaller by removing this obstruction to the venous circulation of the limb. The diminution of the swelling, which rapidly followed the cutting of the bandages and removal of the compress, showed this to be the case. A return of the hemorrhage from the axilla was certainly the danger to be most apprehended, and was, perhaps, the only real cause of anxiety for the issue of the case. The free anastomosis, existing between the branches of the axillary and subclavian arteries, is sufficient, in general, to admit of a return of pulsation in aneurismal tumours in this situation, at a shorter or longer period after ligature of the subclavian artery. Had the re-establishment of the circulation in the present case proved sufficient to renew the hemorrhage, amputation must have been immediately performed, as further pressure in the axilla would then have been inadmissible. The destruction of the coats of the vessel, however, Dr. M. believes to have been of very limited extent, as rapidly fatal, and much more copious hemorrhage than appears to have taken place in the present instance, often occurs from a very trifling lesion of the arterial coats. The surface of the wound, after the separation of the eschar, was healthy, and, as far as could be seen at the time of the operation, showed no further disposition to unhealthy action than was probably induced by the pressure of the compress. These circumstances led him to believe that the shrinking of the artery after the application of the ligature, and the contraction of the wound, which would probably take place after the removal of the compress, would prove sufficient to close the opening in the vessel, before the collateral circulation was established. Had the opening in the vessel, on the contrary, been of larger size, and produced by unhealthy or phagedenic ulceration, the prognosis must undoubtedly have been much less favourable than under the conditions above mentioned. The risk of secondary hemorrhage, on the separation of the ligature, was comparatively small, seeing that the artery at the point where the ligature was applied was sound; and all suspicions of the chronic disease of the arterial system, which is such a frequent cause of dread in similar operations for aneurism, were here absent.

Extraction of a Foreign Body from the Uterus.—Dr. Imlach records in the *Northern Journal of Medicine*, an extraordinary case, of which the following is an abstract:—He was first consulted in May, 1843, respecting a girl, then thirteen years of age, who had the habit of wetting the bed, and in whom there was also a little mattery discharge from the vagina. Some time afterward, when the girl was nearly sixteen, and menstruating regularly and copiously, she was admitted into a hospital, where the use of the speculum showed a profuse discharge of pus from the os uteri. She again came under Dr. Imlach's care, and he then examined with the glass speculum, and found the os uteri enlarged, irregular, and fungous-looking. The finger, however, proved the best explorer, and he discovered the os tincæ pretty high up, ulcerated, open, and of a very peculiar hardness. The point of the finger easily entered the uterus, and there to his astonishment he discovered a hard substance, which from its flat surface, circular shape, and the hole in the centre, he at once recognised to be a reel or prin. He then felt its stem, but could not dislodge it, for want of instruments. A few days afterwards, he removed it with a pair of long ball-forceps. He next made a very careful examination of the parts, but could discover nothing like a pouch, and was quite satisfied that the reel had been actually within the uterus, not partially but entirely. The os tincæ was very irregular, and would easily have admitted two fingers. The cavity of the uterus was large, its walls thick, soft, and well lubricated with the menses. The girl did not complain of any pain during the extraction. The reel was a common wooden one, one inch and a third in length, and five-sixths of an inch in the dimeter of its ends. Plenty of warm water was used with a female syringe during the next two days, after which he again visited the patient, and found that she had had little or no pain since the operation. He then examined both with the speculum and with the finger, and found the vagina smaller than before, and healthy; the os tincæ much contracted, firm, rather irregular in shape, and scarcely admitting the point of the finger. The purulent discharge had entirely ceased ever since that time, but she still occasionally wetted the bed, though not so frequently as she had done during the past six years. The girl declared that she did not introduce the reel into the uterus, but to this Dr. Imlach evidently, and very properly, attaches no credence. He considers it was introduced in the practice of masturbation, but even then, the extraordinary part of the matter is as to its entrance into the uterus. To solve this question, Dr. Imlach asks, to what extent is the mouth of the uterus open during coitus? for if it be then more patent than in the unirritated condition, repeated masturbation might force any such substance as the reel from the canal of the vagina into the cavity of the uterus.

Glycerine.—Dr. Seller, in the *Northern Journal of Medicine*, gives an account of glycerine, a remedy introduced to the notice of the profession by Mr. Startin in the treatment of certain forms of cutaneous disease, in the lectures published in the *Medical Times*. Glycerine is obtained by boiling litharge and oil together in a little water, when it separates, and remains dissolved in the water. Dr. Seller says that the travellers of the London whole sale drug-houses are already exhibiting samples, and soliciting orders for it over the country. Its usefulness depends most probably on its property of resisting evaporation, even at a considerable temperature. Mr. Startin says that a common plate wetted with it may be kept in an oven, side by side with a joint of meat, till the meat is cooked, without any sensible diminution in the quantity of the liquid. Hence, when applied to the skin, it remains moist, forming a coating or varnish, not distinguishable from the ordinary secretion of the part. A lotion composed of half an ounce with ten ounces of water, effectually prevents the skin from becoming dry. When used pure, it makes the part stiff and uncomfortable, so it answers best diluted. It is also added with advantage to poultices, and even to baths. Glycerine is an uncrystallisable transparent fluid, of the consistence of syrup, free from colour when perfectly pure, but usually of a yellowish tint, which may be removed by animal charcoal. It has no smell, the taste is sweet, and not unpleasant; it is heavier than water, 1·250 to 1·280. It dissolves in water in almost every proportion; it is also soluble in alcohol, while it is wholly insoluble in ether. It attracts moisture from the atmosphere, and this probably is partly the cause of its never drying up when spread out thin. At an elevated temperature it boils, part passing over unchanged, while the rest is converted into empyreumatic oils, acetic acid, and combustible gases, with a carbonaceous residue. When set on fire, it burns with a clear blue flame. It undergoes no alteration in the air, and cannot be made to ferment even by the addition of yeast. Nitric acid changes it with some difficulty into oxalic and formic acids. Nitrate of mercury affords a strong white precipitate; with chlorine, glycerine forms a white flocculent solid; and with bromine, a dense oily liquid. Boiled with solutions of salts of copper, it throws down metallic copper. The diacetate of lead gives no precipitate; and with the aid of heat, glycerine dissolves the oxide of lead. With potass it forms a compound soluble in alcohol. By sulphuric acid, it has been said, to be converted, as in the instance of starch, into sugar; but the real effect is the production of an acid-compound, the sulpho-glyceric acid. This acid with bases affords salts, exhibiting some analogies with the sulpho-vinates—these salts are soluble; the sulpho-glycerate of lime crystallises in long delicate needles. It may be obtained either from the residue of the process for making litharge plaster, or from the refuse of the soap-manufactories. When the original process by Scheele is followed, namely, by boiling litharge and oil with a little water, the water takes up the glycerine along with a portion of oxide of lead. The oxide of lead may be got rid of by sulphuretted hydrogen, and the water in part by evaporation; or, if it be desired of high specific gravity, by evaporation in vacuo, side by side with a vessel of sulphuric acid. When an animal fat is chosen, this is the best process. In the details of the first part of the process, the directions given in the pharmacopœias, under litharge-plaster, should be adopted. Dr. Ure, however, recommends, in the case of olive oil, no more than half the proportion ordered by the colleges. When an alkali is preferred to saponify the oil or fat, it should be in the caustic state—the glycerine will be found in the mother liquor along with a portion of the alkali. To saturate the alkali, sulphuric acid should be added as soon as the soap separates, and any excess of the sulphuric acid is then to be neutralised by a little carbonate of baryta. Next the liquid is to be filtered and evaporated to the consistence of syrup, and, after the addition of alcohol, it is to be filtered again. The alcohol dissolves the glycerine, leaving the sulphate of the alkali, and the sulphate of baryta as a deposit. This is the process as directed by Berzelius, but it is manifestly unfit to afford an article for the market. Tartaric acid may be taken here instead of the sulphuric acid, but alcohol is still requisite to separate the glycerine. For external application, the presence of a small quantity of the oxide of lead, or of caustic alkali, will not often be an objection in cutaneous diseases, and if it were, the oxide of lead might be separated sufficiently by sulphuric acid; nor would the caustic alkali, after being changed to a sulphate by the same acid, act injuriously. Glycerine consists of carbon, hydrogen, and oxygen with water, ($C^6 H^7 O^5 + HO$)—and it has been regarded as a hydrated oxide of a radical glyceryl ($C^6 H^7$) not yet separated. This oxide is further described, as a base analogous to the oxide of cetyl in spermaceti, and cerain in bees' wax. This base, united with the fatty acids, constitutes oils and fats—thus margarine is pronounced to be the bimargarate of glycerine, stearine the bistearate of glycerine, oleine the binoleate of glycerine, butyrine the butyrate of glycerine, &c.

Anthrakokali.—In an article, published in the *Northern Journal of Medicine*, entitled a Summary of the Remedies applicable to the Cure of Chronic Eruptions, Dr. Seller says, when speaking of anthrakokali, this substance was introduced several years ago, by Dr. Polya, of Pesth. It is prepared by adding hydrate of lime, to a solution of carbonate of potass with fourteen waters, in a sufficient quantity to set the potassa free; and then filtering and evaporating in an iron vessel, till the fluid assume the appearance of oil, when the residue is to be mixed with coal in fine powder, in the proportion of five parts for every six parts of carbonate of potass employed. The iron vessel is then to be removed from the fire, and stirring kept up till the contents are changed into a black homogeneous powder. It is then to be put into well-stoppered bottles. Dr. Polya prescribes two grains of this powder three or four times a-day in liquorice-powder, or carbonate of magnesia. An ointment is made by adding sixteen grains to an ounce of lard. According to Polya, this compound has the same specific effect over the tettery principle which mercury has over syphilis, sulphur over scabies, and iodine over scrofula. Polya's views have not been confirmed, but Gibert thinks it, as an external

application, a useful moderate stimulus, for example in psoriasis when it has reached its second stage.

Fuligokali.—In the same article, there is a notice by Dr. Seller of fuligokali, a preparation of soot and potass. Gibert finds fuligokali superior to anthrakokali. He has employed it both internally and externally. As an external application it is resolutive, detersive, and stimulant. Its use is in the various forms of tetter, and Wilson says he has found it particularly successful in the treatment of psoriasis palmaria. The following is the mode of preparing the substance. Boil one part of caustic potass with five parts of soot in a sufficient quantity of water for an hour. When the solution cools, filter, evaporate, and dry. The powder or scales obtained must be kept in a dry place, secured in well-stoppered bottles. The ointment employed by Gibert consists of from a scruple to half a drachm united with an ounce of lard. A sulphuretted fuligokali is obtained by heating in a little water four parts of sulphur with fourteen parts of caustic potass, and, after their solution, adding sixty parts of soot. Evaporate, and dry, and keep the resulting compounds with the same precautions against moisture as the fuligokali. It is to be suspected that all these preparations, the anthrakokali, the fuligokali, and the sulphuretted fuligokali, owe their efficacy chiefly, if not exclusively, to the alkali which they contain.

Cocculus Indicus.—In the same article, Dr. Seller thus speaks of the cocculus indicus. An ointment of this drug, a formula for which is now given in the Edinburgh Pharmacopœia, has been used with much benefit, chiefly in the early stage of several forms of porrigo, as in porrigo furfurans, after the removal of the scabs in porrigo lupinosa, and in porrigo scutulata before it has become dry. The ointment should be applied night and morning, and should be washed away with soap and water, at least once a-day. In some of these affections an ointment of picrotoxia has been substituted, and Dr Christison thinks that such an ointment might answer better for all of them. The picrotoxia ointment consists of ten grains of the picrotoxia to an ounce of lard.

Apoplexy.—At a meeting of the Medico-Chirurgical Society of Edinburgh, Dr. Scott made some remarks on apoplexy connected with obstruction in the veins and sinuses of the brain. The case brought before the Society was that of a young lady, who had been seized with paralysis of the left side of the body, with coma. She died in thirty-six hours. In the right hemisphere of the brain a clot of considerable size was discovered, surrounded by broken down cerebral substance; from this a large vein, filled with black and firmly coagulated blood, was traced into the longitudinal sinus. The sinus itself, as well as the lateral sinuses, was filled with firm clots, partly of blood and partly of lymph. These Dr. Scott considered as not being of recent formation, and to have been the cause of the rupture of the vessels of the brain. The preparation of the vein was exhibited. Dr. Scott stated that he had seen several cases of the same kind in young subjects, and he wished to draw a contrast between such cases and those arising from diseased arteries at a more advanced age.

Ireland.

Paralysis from Arsenic.—Dr. Corrigan, in the *Dublin Hospital Gazette*, describes, briefly, a case of paralysis of the upper and lower extremities occurring in a man, as the sequela of a (poisonous?) dose of arsenic taken by mistake for flour. Mercury was exhibited internally until ptyalism was produced, but without benefit. The firing iron was then applied along the spine, and over the thighs and legs, so as to produce superficial scorching, and was used daily. The man in a few days was able to walk, and had regained considerable power over the arms. Strychnia, in the dose of one-sixteenth of a grain, was then given internally, and at the end of three weeks from the first use of the firing-iron, all treatment was discontinued. The man was, however, retained in the hospital a fortnight longer, lest any relapse should occur. At the date of the report, the latter end of last February, he was in possession of perfect health and strength. In commenting on this case, Dr. Corrigan pointed out the mode of using the firing-iron, and the reason for giving it a preference over other counter-irritants. The iron used is very portable, consisting of a thick iron wire shank, of about two inches long, inserted in a small wooden handle, having on its extremity, which is slightly curved, a disc or button of iron, a quarter of an inch thick, and half an inch in diameter—the whole instrument being only six inches in length. The face of the disc for application is quite flat. This, trifling as it may seem, must be attended to. In the French cauterising irons, the buttons for cauterising are spherical, and the consequence is, that they must either be pressed long and deeply into the skin, to bring them in contact with an extent of surface equal to their diameter, or they can be made only to touch at a single point. The only other portion of apparatus required, is a small brass spirit lamp, so small that it can be carried in the waistcoat pocket. To use the instrument, it is only necessary to light the lamp, and hold the button of the instrument over the flame, keeping the fore-finger of the hand holding the instrument at the distance of about half an inch from the button. As soon as the finger feels uncomfortably hot the instrument is ready for use, and the time required for heating it to this degree is only about a quarter of a minute. Its application is effected as quickly as possible, the skin being tipped successively, at intervals of half an inch over the whole affected part, as lightly and rapidly as possible, care being always taken to bring the flat surface of the disc fairly in contact with the skin. In this way the process of firing a whole limb, or the loins, making about one hundred applications, does not occupy a minute, and the one heating by the lamp suffices. Each spot the iron has touched immediately becomes of a glistening white, much whiter than the surrounding skin. In the course of a quarter of an hour, or sometimes of a very few minutes, the whole skin become of a bright red, and the patient feels a glow of heat over the part. The iron is never rendered red hot. It is, indeed, very little hotter than boiling water, and Dr. Corrigan never makes an eschar with it, and very rarely indeed raises a blister. There are merely seen upon the skin next day a number of circular red marks, the cuticle not even being raised, and the surface being ready, if required, to receive a fresh application, which is of no trifling consequence where such an extent of counter-irritation has been used, there being no discharging surface to interfere with the motion of the limb, or the comfort of the patient. Indeed, in most cases, the patient is quite unconscious of what has been done. Dr. Corrigan strongly recommends this plan of firing as being preferable to other means of counter-irritation, because it can be applied so rapidly and so extensively, and he says his clinical clerks prefer it for themselves when affected with local muscular rheumatism, as being the least troublesome, the most rapid, the least painful, and the most effectual. Dr. Corrigan advises it in lumbago, sciatica, neuralgia, and paralysis.

Pitting of Small-Pox.—Dr. Tyler, in the *Dublin Hospital Gazette*, states that he employed the Vigo plaster with perfect success to prevent the pitting of the cicatrices, in a case of variola of a very formidable character.

Pituitary Catarrh.—Dr. Evans, in the *Dublin Hospital Gazette*, describes a case of pituitary catarrh, combined with extreme cachexia, in treating which, there being no counter-indicating gastric irritation, he gave chalybeates and vegetable tonics. Under this plan the patient's strength increased, the pulse diminished in frequency, the hectic subsided, and the bronchial secretion lessened. With respect to the prognosis of pituitary catarrh, he remarks that cases of this kind, which are very common, are apt to produce vesicular emphysema, or to terminate in the development of tubercles.

The cholera, while within ten days' journey of Teheran, has suddenly been arrested. The winter, which had been previously very mild, had become rather severe, and there had been a fall of snow.

Oxalate of Lime in the Urine.—Mr. Stallard narrates two cases illustrative of the great irritation in the urinary organs induced by the presence of oxalate of lime in the urine.

ORIGINAL LECTURES.

A Course of Lectures on Hernia,

By JOHN FLINT SOUTH, Esq.,

Surgeon to St. Thomas' Hospital, and Professor of Surgery to the Royal College of Surgeons.

(Delivered in the Theatre of the College, and revised by the Professor for the Medical Times.)

Lecture I.

Interest of the subject—Frequency of rupture—Attention given to it by Pott, Cline, and Astley Cooper—Information afforded by Petit, Ledran, Scarpa, and Jules Cloquet—Work on Ruptures by Mr. Lawrence, and recent Work by Mr. Teale, of Leeds—Writings by Cheselden, Gooch, Cheston, White, Bromfield, and Pott—Wiseman—Value of researches by Paré, Franco, Vigo, Guido de Cauliaco.

Definition of Rupture: Abdominal ruptures—Division into thirteen kinds—Comparative ferquency of the different kinds in the two sexes—Ruptures, either original or acquired—Conditions of a rupture—Sac: Variations in thickness—Predisposing causes of rupture—Immediate causes—Ruptures of three kinds: Reducible, incarcerated, strangulated — General observations on reducible ruptures: Symptoms—Shape and appearance—Size—Effects of sneezing and coughing—Disappearance of reducible ruptures on lying down—No constitutional symptoms when reducible or reduced—Effects when confined in the sac—Circumstances distinguishing the contents of a rupture—Fallacy of these signs.

Treatment of reducible ruptures: The truss—Requirements in the truss—Petit's observations on the truss—Effect of the pressure on the sac—Suspensory bandages.

Mr. President and Gentlemen,—I have selected rupture as the subject for consideration in the course of lectures I have now the honour to deliver before this College, believing it to be inferior in importance and interest to no one of the several diseases which fall under the care of the surgeon. It must be allowed that it is one of the most frequent ailments with which we have to do; but its commonness is one great cause of its importance, and another is presented in the necessity for an accurate knowledge of the complaint, in order to the often immediately required decision as to its treatment, the hastening or delaying of which, or it may be even of an operation, only for a very few hours, rendering it less or more dangerous, and restoring the patient to health, or devoting him to almost certain death.

The importance of the subject is further shown by its having attracted the attention of some of the greatest practical surgeons of this country—Pott, the elder Cline, and Astley Cooper. Of these highly-gifted men, Pott and Cooper only have given to the public, in a written form, the results of their observation and experience. Their excellent treatises on rupture, and more especially the magnificent work of Cooper, have long been, and will doubtlessly continue to be, our authorities on this subject. To the latter, especially, we are indebted for the thorough knowledge of femoral rupture, for the discovery of that peculiar covering of this rupture, to which he gave the name *fascia propria*, and of the true seat of stricture in this dis contradiction of the celebrated Spanish Gimbernat. It is much to be regretted beyond his lectures, there is no account of the labours of Mr. Cline in reference to rupture, for that he specially directed his attention to it is proved by the preparations he made, several of which are still in the museum of St. Thomas' Hospital, for the purpose of illustrating one of the two courses of lectures which he delivered on this subject, at Surgeons' Hall, in the year 1781 and 1782, when he held the office of professor; and

it is probable that he was induced to select his subject, in consequence of having, in 1777, discovered in a Chelsea pensioner, whose body he examined with Mr. Gunning, the existence of that form of inguinal rupture, now generally named "direct." Mr. Lawrence's work on ruptures, originally one of the essays sent in for the college prize, and subsequently enlarged considerably by the results of his reading and his own great experience, is a very excellent and practical work. And I have also much pleasure in directing your attention to the recent publication on the same subject by my old friend and fellow-student, Mr. Teale, of Leeds, which has added fresh reputation to his already highly deserved professional character, and sustains the high rank which the surgeons of Leeds have for so many years held in our profession.

Nor in making mention of our own countrymen, must we overlook the valuable information afforded by Petit, Ledran, Scarpa, and more recently by Jules Cloquet. In regard to Petit, it is much to be regretted that his treatise is not more commonly adverted to, as it contains a mass of personal observations and information of great practical utility.

I would here take the opportunity of impressing upon the younger part of my audience, many of whom, I trust, have determined to attain the honours of this college, that a large store of knowledge is ready to their hand in the surgical writings of the last century, more especially of the French school, for, with the exception of Cheselden, Gooch, Cheston, White, Bromfield, and Pott, English surgeons, prior to Mr. Hunter, were little better than copyists or commentators on French surgery. Exception also must be made of the "Several chirurgical treatises" of the illustrious Wiseman, who was fully equal, if not superior, to the French surgeons of his time—the middle of the seventeenth century—when the French Academy of Surgery was founded. These authorities, with the exception of Pott, are now rarely referred to, though full of practical information—a circumstance much to be regretted, and which I should gladly see repaired, as the study of these writers, and not merely of them, but even of Paré, Franco, Vigo, Guy de Chauliac, and others of still earlier date, could shew that much had been done for surgery in reference to the observation of disease, and the performance of operations, which have been put forward by modern writers, who have filched from the stores of these now little read fathers of our profession, without compunction appropriated to themselves, and reproduced as their own, opinions and operations which were of old date, often correct and useful, but which had been gradually superseded by that fondness for change and novelty which mankind generally, and our profession not least among the number, is too much disposed to favour.

A RUPTURE is the bursting forth or breaking out of any bowel from the cavity in which it is naturally contained. It may happen in either of the great cavities of the body, the belly, the chest, or the head; but the term by which the disease is designated is more especially employed in reference to those protrusions which take place from the belly, and are commonly known as HERNIÆ.

Of abdominal ruptures, thirteen kinds are commonly described; of which nine, escaping from the muscular cavity of the belly, form external swellings, whilst the tenth is not to be seen, as it passes into the chest. The other three never leave the belly, but merely pass through originally or accidentally-formed holes in one layer of the doublings of peritoneum which connect the chyle-making intestines to the spine, and thus, though within the walls of the belly, are on the outside of the peritoneum.

The nine externally appearing ruptures are the

Inguinal,	Ventral,	Perineal,
Femoral,	Thyroid,	Vaginal,
Umbilical,	Ischiatic,	Rectal.

The one internal rupture is the Phrenic. The other ruptures are the Mesenteric, the Mesocolic, and Meso-rectal.

As to the frequency and predominant kind of abdominal ruptures in the sexes, an interesting statistical account has been given by Mr. Lawrence, from the register of the City of London Truss Society, during a period of twenty-eight years: whence it is shewn that—

		IN MEN.		IN WOMEN.
Of 76,730	abdominal ruptures of all kinds, there were	65,031	....	11,699
	Or a proportion of	$5\frac{1}{2}$	....	1
39,419	were single inguinal, of which	38,322	....	1,097
	Or a proportion of	35	....	1
25,252	were double, of which	21,966	....	286
	Or a proportion of about	134	....	1
64,671——				
6,210	were single femoral, of which	699	....	5,511
	Or a proportion of rather more than	1	....	9
1,777	were double, of which	169	....	1,608
	Or a proportion of	1	....	$10\frac{1}{2}$
7,987——				
3,439	were umbilical, of which	664	....	2,775
	Or a proportion of	1	to rather more than	5
624	were ventral, of which	209	....	415
	Or a proportion of nearly	1	....	2
5	were thyroid	1	....	4
4	were perineal	1	....	3

and that of the total number, inguinal ruptures were more prevalent than the other kinds in the proportion of nearly seven to one.

Ruptures may be either *original*, that is, existing at birth, and therefore called *congenital*, in consequence of certain apertures from the belly, which exist during fœtal life, continuing unclosed, as especially in umbilical and congenital oblique inguinal rupture; or they may be *acquired* at any after period of life, under which circumstances, although either kind of rupture may occur, yet inguinal rupture is by far the most prevalent of all in both sexes, and next to it femoral rupture in females, as has been already shown.

The conditions of a rupture are—a protrusion of bowel, either gut, omentum, or bladder, or any or all of them, enclosed in a sac-like extension of the peritoneum which they have driven before them, in escaping from the belly, and which sac once formed has coverings, called its coats, consisting of the parts beneath which it is thrust. To this general condition as regards the peritoneum, there are perhaps two exceptions:—umbilical rupture has probably no peritoneal sac, and phrenic rupture has not a sac of any kind.

The peritoneal sac varies in thickness: at the first production of an acquired rupture it is thin, but afterwards it is uncertainly thin or thick, unless a truss has been worn, when it is generally thickened; the bulk of the rupture does not, however, necessarily induce thickening of the peritoneal sac, but rather the contrary. But there are instances in which the peritoneal sac is not merely thickened, but has a cartilaginous character, and in some very rare cases it is said to be converted into bone, of which there is an example in a femoral rupture in St. Thomas' Museum; this, however, is not the case, the presumed ossified sac is merely a small ossified absorbent gland.

The thickness of the coverings of the sac is also generally subject to great variety; but in general the muscular coat which a scrotal rupture obtains from the cremaster muscle is of proportionate thickness to the bulk and weight of the rupture, the muscular fibres being more than usually developed for the support of the additional weight thrown upon them; but even this is not always so.

The *predisposing causes* of rupture are—weakness of the walls of the belly, either from the general want of tone in the muscles, or from their thinning by distension in pregnancy, dropsy, or when large tumours have formed in the cavity of the belly, or in consequence of rapid emaciation, especially after corpulence. A blow, by which the abdominal muscles are torn without breach of the skin, or a stab, shot, or other wound, in which both skin and muscles are divided, are almost invariably followed by protrusion of the bowel, after healing of the wound, and the patient getting about, although previously no rupture had been noticed, or, if observed, had been prevented.

The *immediate causes* of rupture are—excessive pressure on the bowels by violent contraction of the abdominal muscles in straining at stool or making water, in severe vomiting, coughing, or labour; also in violent exercise, as riding, climbing, running, rowing, or the like, or in pushing and lifting or carrying heavy weights. Blows on the belly, even when the walls are uninjured, will also cause rupture, and wounds of the walls of such size that the escape of the bowel cannot be checked.

Ruptures are of three sorts:—

First, reducible, in which the protruded bowel passes from the belly into the sac, and returns into the former cavity, according to the posture of the body; or which, if for a time it be retained in the sac, can be returned by manipulation into the belly, and in both cases is usually not attended with marked symptoms.

Secondly, irreducible, or as it may be justly called, incarcerated, in which the protruded parts are, from various causes, as entanglement by bands stretching across the sac, or adhesion to it, prevented returning into the cavity of the belly, either by posture or manipulation, yet without interference with their functions, and consequently without symptoms.

Thirdly, strangulated, when, either without or with incarceration, such constriction of the protruded bowel is produced by one or other part of the peritoneal sac, or of an accompanying bowel, that the natural functions of the bowel are partially or entirely suspended, and give rise to a peculiar and characteristic set of symptoms corresponding in severity with the mischief going on in the protruded bowel, and which, unless relieved, has a fatal issue.

GENERAL OBSERVATIONS ON REDUCIBLE RUPTURES.

Symptoms.—The first sign of a rupture is the appearance of an unnatural swelling on any part of the wall of the belly, or its immediate neighbourhood, where ruptures are known to present. The swelling may have either existed at, or very speedily after, birth, as in umbilical or congenital inguinal rupture, or it may appear suddenly at any time of life, according to the circumstances under which it arises. It varies in form according to its position: is sometimes pear-shaped, as in scrotal rupture; sometimes irregularly hemispherical, with a broad base proportioned to its size, as in umbilical rupture; or more rounded, less prominent, and with a narrower base, as in ventral rupture; or of an oval form and spreading base, as in femoral rupture. The size of the swelling is generally in proportion to its duration, usually being at first small, and subsequently increasing; but this is liable to variety. And, indeed, some ruptures are ordinarily exceptions to this rule—as, for instance, femoral ruptures, which for the most part either at first, or very soon after their appearance assume their full, or their nearly full bulk, and increase but very little after. The ruptures which acquire the greatest size are the umbilical and the scrotal, in either of which occasionally the greater part of the bowels escaping from the cavity of the belly become lodged in the rupture-sac. The size of the swelling is increased by exertion, the pressure of the abdominal muscles, and the descent of the diaphragm, thrusting the bowels from the belly into the sac. This may be observed in hallooing, sneezing, or coughing, even with little effort, and on the temporary enlargement then ensuing, the rupture is, in surgical language, said "to dilate." This dilatation becomes a symptom of rupture, and by slight coughing is rendered perceptible to the hand, when grasping the tumour, by the impulse communicated to it, though the

protrusion be not so great as to produce to the eye any apparent increase of size. Reducible ruptures are also characterised by their appearance when the body is erect, and their disappearance on lying down, consequent not merely on the abdominal muscles ceasing to compress the bowels and to force them from the belly, but also on the pull on them by the bowels still in the belly, assisted even by their own peristaltic action. The readiness with which the bowel passes from one cavity to the other depends on the size of the aperture and the quantity of bowel forced out, and whether the latter be little or much distended with air or fæces. If it be much distended it will not return, even when the patient lies down, until its contents have been emptied; and if this be done, even in the erect posture, the rupture may often be reduced without difficulty, although it descends again immediately that the fingers are removed from before the mouth of the sac.

Beyond these outwards signs, ruptures, while reducible and reduced, produce no constitutional symptoms; but when protruded, either in consequence of no truss being worn, or when of such size that a truss is useless, then after exertion there is much wearisomeness, and if the bowel be for a time confined in the sac by a greater quantity than usual having descended, or by the gut which is down being loaded with fæces, or much distended with air, uneasiness and dragging of the stomach, squeamishness, or even vomiting, and irregular relief from the bowels, or even constipation, may occur, and continue till the rupture has been reduced, when they cease.

Surgical writers and teachers have not unfrequently mentioned certain circumstances as distinguishing the contents of a rupture from each other — thus one swelling regular, elastic, and affording a gurgling feel or even noise when pressed between the fingers and thumb is held to be an intestinal rupture; whilst another which is irregular, has a doughy feel and does not gurgle, is thought to be an omental rupture. Daily experience, however, proves that these are most uncertain distinctions, and not to be relied on. The gurgling is often absent in intestinal rupture, and may exist in the omental, especially in old and large ruptures, in which the lubricating fluid of the peritoneum is not uncommonly increased in quantity, and, descending into the sac, collects, and moving about when squeezed produces gurgling or fluctuation, just as would a bladder partially filled with water. The doughy feel is often merely effusion of serum into the cellular tissue resulting from the patient's repeated efforts, or the surgeon's coarse handling of a rupture, which, though only retained in the sac from the causes already mentioned, requires rather more than ordinary effort and skill for its reduction. Further, there may be both gut and omentum in the sac at the same time, and both or neither of the described symptoms may exist. It must, however, be admitted, when a rupture is of large size and its walls very thin, if there be much gut down, its crawling peristaltic motion may not unfrequently be felt, and occasionally even seen through the skin. In those rare ruptures, into which the bladder has either dropped or been dragged, the symptoms mentioned, to wit, constant disposition to void the urine in consequence of the weight of the protruded part dragging on that portion of the bladder which retains its natural place, and diminution of the size of the rupture-swelling merely by raising it, and so decanting the urine contained in the protruded part of the bladder from it into the unprotruded cavity of that organ, may doubtlessly occur, and afford a good distinguishing character of the sort of rupture. But inasmuch as this unnatural condition of the bladder is almost invariably the result of an intestinal or omental rupture, and accompanied with one or both of these, so it becomes even more difficult or even impossible to distinguish between the contents of the rupture-sac.

Treatment.—The objects in treating reducible ruptures are—to retain them in the belly by preventing their descent, and to avoid all efforts which may promote their escape from the belly, and, tending to increase their bulk, may enlarge the mouth of the rupture-sac so considerably that no remedy is sufficient to prevent their bursting from their proper cavity.

To prevent the protrusion of a rupture various kinds of trusses are employed, consisting of either a pad, to cover and press against the aperture by which the bowel escapes, or a simple bandage, to keep it in place, or a pad attached moveably or immoveably to a half-hoop spring, one end of which rests upon the *sacrum*, whilst the other presses the pad upon the seat of the rupture. I prefer a fixed pad, as, if properly fitting, it keeps its place best, and makes most steady pressure.

Although the permanent cure of a rupture by the use of a truss is not to be expected, when the protrusion first occurs in adult life, yet the attempt to effect it should not be lost sight of, more than in young persons The application of the truss is, therefore, not simply to prevent the escape of the bowel from the belly, but also with the object of producing the union of the sides of the passage through which it passes, and thus destroy the track by which it has travelled.

To effect this, the truss-pad must have such size and position as to cover both the aperture by which the bowel escapes from the belly, and also the passage through which it runs towards the surface of the body; and it must also be retained in such position, with sufficient pressure, to keep the walls of the passage in close and permanent contact, which has the only chance of being effected by the attachment to the pad of a spring of sufficient strength to countervail the disposition to protrude which the action of the abdominal muscles is constantly exciting in the once-protruded bowel.

Two very important points are connected with the use of trusses, upon which, indeed, the benefit to be derived from them entirely depends: first, that they should always fit well, and, secondly, that they should never be removed when in the erect posture.

1st.—Unless a truss fit well it is of no use, and even hurtful. It must be remembered that the patient's condition is continually varying, and that his form is constantly undergoing a less or greater change, more especially in young persons; consequently, a truss which fits well, and serves all the required purposes when first applied, will, in growing children particularly, cease to do so in the course of a few months, and need re-adjustment. It must, therefore, from time to time, be looked after, and such alteration made as is requisite. In adults, in whom there is less change of form, except so far as depends on stoutness, the truss requires attention, because, in consequence of exertion, more especially in labouring people, the rupture oftentimes soon overcomes the resistance of the truss, the spring of which needs to be strengthened in proportion.

Petit makes some very valuable observations in regard to the use of trusses. He remarks that "it is very common, after two or three days, to find that some part of the rupture has slipped from beneath the truss, or rather that there is a swelling of the spermatic vessels, or even of the testicle itself. If it be ascertained in these cases that the rupture is well kept up by the pad, we must find out the cause, which is commonly that the thigh-strap is too tight, and it must then be slackened. If, however, the pad be too wide, or its edges too thickly stuffed, and it compress the vessels, the bandage must be changed, and a pad narrower and with more shallow edges must be applied." He further observes that "the omentum is the only part which protrudes, as it may be said, *incognito*, because it may be compressed without the patient's notice, inasmuch as it is not sensible; instead of which, when the gut descends, the patient immediately perceives it, by the severe pain and nausea it produces. But more commonly the omentum is protruded; for there is the difference between the two parts, that the intestine protrudes with great difficulty, and readily returns, whilst, on the other hand, the omentum escapes with readiness, but is difficult of reduction."

It is, however, important that the pressure of the truss should not be excessive. "There is less risk in its being little tight than being too tight," says Petit; "it is wise in the surgeon to avoid this excess, for I have often seen gangrenous abscesses form, in which I have found putrid omentum from this cause," and he mentions two cases, one of inguinal, and the other of umbilical, rupture, in which this occurred, but which, however, recovered after suppurating.

2nd.—The truss should never be removed day nor night, excepting for a few minutes, and when the person is recumbent, for the purpose of cleanliness, and it should be re-applied before he change his position. Unless this advice be attended to strictly, a young person especially may in a few minutes have all the benefit of that narrowing of the upper part of the rupture-sac, which has been slowly attained during months, or even years lost, his cure retarded, or even actually prevented, and the rupture rendered permanent by being again forced down when its sac is unsupported.

Those persons born with ruptures, or in whom they occur at an early period of life, may generally be cured, if a truss be constantly worn for some years; but when ruptures are acquired at the adult period they are rarely cured, and still less frequently, if ever, in more advanced age.

In regard to the cure of ruptures by wearing a truss, Petit says, "We know that the sac disappears little by little during the use of the truss, when it well retains the parts, and that more who wear them are not cured, unless they use them till the sac has entirely disappeared (effacé), or, to explain myself better, until the portion of peritoneum which forms the sac, has become adherent to the intestine, or has entirely conformed itself to the rest of that membrane within the belly, resuming the polish, extent, and natural elasticity. This really happens, as I have seen on opening many bodies who have died of other diseases, which during youth have been cured of rupture by wearing a truss. I do not say this is always the case, but I have very frequently noticed it." That he certainly means the peritoneal sac, in both instances, returns into the belly is proved by the question he subsequently asks and answers:—"Is it possible that these adhesions are destroyed? Certainly not, they are always the same; to understand what happens, let us revert to what I have already observed in speaking of the hernial sac. I have said that in ruptures cured without operation, the portion of peritoneum forming the sac returns into the belly, and resumes its level with the rest of the peritoneum; but in ruptures with adhesions, treated as I have just mentioned (first with a cup and then with a pad truss), if these parts return, the sac must also return with the adhesions it has contracted with those parts."

It would seem, however, that on this point Petit is in error; for when ruptures are cured, not the whole sac, but merely that part of it pressed on by the pad of the truss is obliterated, and the cavity below it still remains. This certainly happens in inguinal and femoral rupture, but I have not seen any dissection of any other cured rupture. Umbilical rupture, undoubtedly when of original production, is often cured without much difficulty; but in this case the sac of cellular tissue and skin is actually thrust into the aperture like a plug, which, being more and more closely embraced by the natural disposition to contract, which the umbilical hole has in infancy, union takes place between them, and the cure is thus effected.

Occasionally it happens in all, and especially in large ruptures, that they cannot by any means be kept within the cavity of the belly, and, being thus unrestricted, go on increasing until nearly all the bowels are contained in the rupture-sac. All that can be done in such a case is to protect and support the rupture by suspensory bandages of various kinds, which may be made of some sufficiently stout material, to prevent further protrusion.

Sea-Sickness.—A correspondent of the *Lancet* gives the following lucid (?) explanation of sea-sickness:—I believe that in sea-sickness a churning motion of the blood is kept up, in the large blood-vessels going to the brain, and in the sinuses, &c., of the brain. Sometimes there is too much blood, sometimes too little, there. Confusion takes place, and sympathetic nausea and retching, &c., from irregular distribution and circulation of blood in the brain. [In all probability, the writer had suffered from sea-sickness, and his brain had been so *churned* that it had become converted into butter.]

A Course of Lectures on Practical Midwifery.

Delivered this Session at St. Bartholomew's Hospital, and revised especially for the Medical Times,

By EDWARD RIGBY, M.D.,

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PREMATURE EXPULSION OF THE OVUM.

GENTLEMEN,—From the great variety of forms under which premature expulsion of the ovum may take place, as well as from the number of causes which may give rise to it, it becomes a matter of considerable importance. In order to facilitate a correct understanding of the subject, most of the continental writers have divided it under three heads, according to the periods when it occurs. Thus, expulsion of the ovum previous to the sixteenth week is termed *abortion*, from which time until the twenty-eighth week it is called *miscarriage*, and after that period *premature labour*.

A child may be born at a very early period of pregnancy showing distinct evidences of life, but it will not be capable of maintaining an existence apart from its mother until the last division, or, in other words, until after the twenty-eighth week. Cases, I own, have occurred of children having been reared which had been born before this period, but they are exceedingly rare, and must be looked upon as exceptions to the rule

It is not less important to distinguish abortion from miscarriage than miscarriage from premature labour; not on account of the child, because of course it cannot be saved, but in order that we may form a more correct estimate of the danger to which the mother is exposed.

Abortion is the most frequent, and fortunately also the least dangerous form of the "*Partus ante justum terminum*," because the uterine development being inconsiderable, the blood-vessels are small, and the hemorrhage seldom of any amount. On the other hand, a miscarriage is a much more serious affair; the development of the uterus and embryo are further advanced, the process is usually attended with severer suffering, greater loss, and more serious derangement of health.

You will recollect, when speaking to you of the decidua and the fœtal membranes, that I stated them to have a much feebler attachment to each other, and to the uterus, in the early weeks of pregnancy than afterwards, so that a separation can be much more easily produced at this time than at a later period; and now also that the ovum is small, a slight separation will be a much more serious injury to it than a larger one when it is more advanced.

Thus Dr. W. Hunter says, "When seven weeks are up, I know that they are near the time of trial or of blighting; when *that* happens they must miscarry, therefore that is the time for fear. I shall be sent for perhaps to a lady miscarrying about the eleventh week—it is too late to prevent it—nothing in particular can be done. I know the child is dead, and she will most likely miscarry in the twelfth week. This happens (death of the child) commonly about the eighth week or beginning of the ninth; but we are not certain to a few days. The dangerous time of blighting, then, is about the eighth week, and the miscarriage happens a little after."—(MS, Lectures).

I before mentioned to you, when speaking of the death of the fœtus, that this occurrence is not necessarily followed immediately by its expulsion, and, generally speaking, the earlier in pregnancy the embryo is destroyed, the longer is it before abortion takes place. When, however, the pregnancy has become advanced, so that the uterus has acquired considerable size, miscarriage generally follows soon after the death of the fœtus. The os uteri becomes flaccid and relaxed; it dilates somewhat; and the membranes, running into putrefaction, are no longer able to bear the weight and pressure of the liquor amnii; they, therefore, burst, the liquor amnii escapes, and expulsion follows.

In an old set of aphorisms on this subject by the celebrated Mauriceau, published in 1694, it is stated that the fœtus runs into a state of putrefaction much sooner when the violence, or other cause, which occasioned its death has also produced a rupture of the membranes. The cause of this is very evident, and it is no less plain that, under these circumstances, the fœtus will not be retained.

The causes of premature expulsion of the fœtus are numerous. I may mention, as among the most common, external violence, sudden shocks—either affecting the body; sudden alternations of heat and cold; debilitating evacuations; certain purgative medicines, which irritate the intestines, and act by the propagation of this irritation to the uterus; certain medicines which act by irritating the bladder—such as savin, cantharides, &c.; other substances which seem to act specifically on the uterus; as ergot of rye and some others. Dysentery, which some women are very liable to during pregnancy, is a frequent cause of miscarriages. The irritation of the bowels is here propagated to the uterus; I recollect one lady whom I attended, and in whom I had the utmost difficulty in preventing a miscarriage, in consequence of the severe and distressing dysentery she suffered from during her pregnancy.

There is another set of causes to which I must allude, which I shall name *internal causes*. I mean plethora, and its effects. Abortion from an overloaded state of the uterine circulation is by no means uncommon, and generally takes place at one of those periods which, in the unimpregnated state, would have been a menstrual period. A woman can often by certain symptoms recognise her menstrual periods throughout her pregnancy; and these are the times chiefly to be watched, if you suspect anything like a plethoric tendency. Plethora at these times produces a degree of uterine congestion, which may give rise to a kind of uterine apoplexy, and extravasation of blood may either destroy the child or rouse the action of the uterus to expel it without this previous effect.

There are many other causes of premature expulsion of the ovum. All the various dyscrasies of the system, which either rouse the uterus to contraction or destroy the child. Syphilis and mercurial erethism act by destroying the child. Constipation, when allowed to continue unrelieved, is a very frequent cause of abortion. A woman may produce a dangerous degree of congestion of the uterine system by too long standing, or by long continued walking exercise. I know one case of a lady who had a great dislike to children, and who endeavoured to induce abortion by continued standing. She was seized with a great desire to attend sales, &c., and would stand for hours with this intention, and nothing would induce her to sit down at evening parties, but she would stand until she was ready to drop. Of course, Gentlemen, such conduct is perfectly unjustifiable. Other diseases arising from mal-assimilation—as gout or rheumatism may produce abortion. A rheumatic gouty habit, indeed, gives rise to a very irritable state of the uterine organs, and renders it very difficult to carry the patient safely past her monthly periods.

As a general rule, Gentlemen, you must bear in mind this axiom. *The same causes which in the unimpregnated state produce derangement of menstruation and other uterine disorders, now act as so many causes of abortion.* Spasmodic affections which are common during pregnancy—such as irritation of the nerves of the face, toothache, &c.—may give rise to abortion, and it generally happens at what in the unimpregnated state would have been a menstrual period. Abortion may thus take place at the first or second period, so that the woman in many of these cases does not even know she is pregnant.

Too frequent sexual intercourse is undoubtedly not an unfrequent cause of mischief in the early months, which I need hardly say does not exist as pregnancy advances.

Abortion is observed far more frequently in the upper than in the middle and lower ranks; indeed, I may say that a fifth, or even a fourth, of our ladies of rank abort in their first pregnancies. This may easily be conceived when you recollect the life they lead: their late hours, both of rising and going to rest, the tight dressing, nourishing and stimulating food without the proportionate degree of active exercise, warm beds, hot rooms, crowded assemblies, and mental excitement—all tend to unfit them for passing through the important process of early pregnancy safely.

Abortion may be defined to be a separation of the ovum, with contraction of the uterus.

When the pain precedes the discharge, we can rarely prevent abortion from taking place; but when the discharge has come on without pain, the prognosis will be more favourable. These two symptoms, I need hardly tell you, are caused, the first by the separation of the ovum, more or less, although it may occur without; the second by contraction of the uterus. Now, when the pain precedes any external discharge, we are justified in supposing that there is a high degree of irritation set up in the uterus, which has probably arisen from extravasation of blood at the upper part of the ovum; in order to permit the escape of this, it will be necessary for the ovum to be still further separated, most likely to a considerable extent, which gives but a poor chance of the patient escaping abortion. If, on the other hand, the discharge occurs without pain, or with very little, the separation of the ovum is probably near the os uteri, where it finds a ready escape, and after the discharge of blood has relieved the uterine congestion, she may go on without expelling the contents of the uterus. I have met with numerous cases of this kind. In many the patient has experienced much relief from the discharge. She has felt cooler and lighter, and in better health altogether, and has afterwards carried the ovum to the full period.

As regards the prophylactic treatment of a patient with a tendency to abort, much may be done, perhaps even more than in the treatment of the attack itself. It is of great importance in all cases to prevent abortion, if possible; for although many fashionable women may look upon it as a matter of no consequence, still in the end they are sure to suffer from its injurious effects.

In deciding on the prophylactic treatment, a reference to the predisposing causes is absolutely necessary; but in all cases a strict attention to the removal of causes of irritation from the stomach and bowels is indispensable. Everything capable of exciting the circulating system must be strictly avoided; the diet should be light and nutritious; regular exercise—never, however, carried far enough to produce a sense of fatigue—should be taken, and every means should be used to promote a healthy state of the system generally.

The first thing, Gentlemen, for you to ascertain is, whether the system be above or below par, in point of strength or tone, since abortion may arise from two very opposite conditions. If the patient have miscarried on a former occasion, you must be careful to watch her past the period of pregnancy at which the abortion previously took place; for the uterus soon acquires a habit of contracting on its contents at a certain time. In such cases, if the patient be plethoric, venesection becomes necessary; but this must be performed with much caution. Faintness must never be induced, and sufficient blood only should be drawn to reduce the pulse in hardness After venesection, if any uterine irritability be present, opium should be administered. This, with a spare and regular diet, mild saline laxatives, regular exercise, light and loose clothing, &c., will often suffice to save the pregnancy. If, on the other hand, your patient be a weakly, delicate woman, with no stamina, wine, iron, and tonics must be given freely. I once saved a patient purely by these means, who had aborted several times previously. In a succeeding pregnancy she aborted before I could get to her, and a very serious case it proved. You thus see that, in some cases, we must adopt a treatment diametrically opposed to that required in others. In those cases which show a state of atony of the system generally, you must advise the cold hip-bath, and cold sponging, with a light nutritious diet. There is a work I should recommend to your notice very strongly; if ever you can get hold of it at an old book-stall, by all means buy it. I mean White's Observations on Lying-in Women. It contains some admirable remarks on the use of the cold bath, among other topics connected with this subject. I am in the habit of prescribing this mode of treatment very frequently, and I can, from my own experience, vouch for its beneficial effects. You have no idea how far it may be carried with benefit

when commenced early, or even before pregnancy, and carried on regularly. One patient of mine continued to bathe in the sea till January; another, a relative of my own, went on bathing every morning in the sea till the day of her labour.

In patients who have manifested a decided tendency to abort, you must not be above inquiring into the minutest particulars. Very slight causes of irritation may be sufficient. Tightness of the dress, by irritating the breasts, and preventing their development, may determine its occurrence.

In some women, as I have before told you, the uterus gets into a habit of expelling its contents prematurely, so that they never bear the child beyond a certain period. When abortion has thus become habitual, in spite of all our precautions to prevent it, the only chance will be by giving the uterus an entire rest for a considerable period. You should advise a complete separation from the husband for twelve or fourteen months, and after this you may by care enable the patient to carry her subsequent pregnancies to the full period.

Dr. Young, a former professor of midwifery at Edinburgh, used to quote a case of a patient who had miscarried thirteen times, and yet bore a child at the full time in her fourteenth pregnancy, so that we must not despair in these cases. At the same time let me beg you never to underrate the injurious effects of repeated abortions; menstrual derangements, such as dysmenorrhœa and menorrhagia are not unfrequently the results—not to mention leucorrhœa, inflammation of the cervix uteri, and disposition to scirrhus and other organic mischief.

In speaking to you of the effects of plethora in inducing abortion, there is a little quotation which I intended to have made from Dr. Dewees' writings respecting the pernicious habit of taking too much nourishment. Speaking of the sickness which occurs during early pregnancy, he says, "It certainly cannot be intended for any other purpose, since it is not only almost universal, but highly important when it occurs, as it would seem to add much to the security of the fœtus; for it is a remark as familiar as it is well grounded, that very sick women rarely miscarry; while, on the contrary, women of very full habits are disposed to abortion, if exempt from this severe, but as it would seem important, process."

You see, therefore, that, in these cases, you must act carefully. "We might often prevent abortion," says Baudelocque, "if we were perfectly acquainted with its cause, even when the labour is already begun. A very plethoric woman felt the pains of childbirth towards the seventh month of her pregnancy, and the labour was very far advanced when I was called to her assistance, since the os uteri was then larger than a half-crown; two little bleedings restored her calm so much, that the next day the orifice in question was closed again, and the woman went the usual time. Food of easy digestion prudently administered, quieted a labour not less advanced in another woman, where it was suspected to be the consequence of total privation of every species of nourishment for several successive days. Delivery did not take place for two months and a half afterwards, and at the full time. Emollient glysters and a very gentle cathartic procured the same advantage in a third woman, in whom labour pains came on between the sixth and seventh months of pregnancy, after a colic of several days' continuance, accompanied with diarrhœa and tenesmus." Here, then, we have three cases related arising from three very different causes, and yet by three different modes of treatment they were all conducted to a satisfactory termination. To resume. If the system be plethoric you must bleed sparingly, but you must recollect that great caution is here requisite, as sometimes the abstraction of very little blood will in these cases produce powerful effects. Often as much blood may be lost by hemorrhage without danger as would produce serious faintness, if removed by bleeding. The patient must of course be ordered to bed; the feather-bed being removed from the mattrass, and cloths wetted with cold water, or vinegar and water, should be applied to the perineum and mons veneris. I am no friend of the application of ice in these cases, as I have seen it do harm by causing so much collapse as even to require warmth and stimuli to remove it. As soon as you have reduced the power of the circulation, or if the patient be not plethoric, immediately, you must give a full dose of opium. I prefer the liquor opii sedativus or morphine, or you may administer a clyster containing a full dose of opium in a small quantity of starch. If the flooding be at all profuse you may be convinced that separation of the ovum has taken place to a considerable extent, so far, indeed, that reunion cannot be expected, and you must, therefore, turn your attention to its expulsion with as little danger to the mother as possible.

Clinical Lecture on Typhus Fever.

By Dr. Corrigan.

Delivered at the Hardwicke Hospital, Dublin.

Typhus not a Disease of Structure; Importance of this in Practice; Typhus analytically considered; Most important Phenomenon a Lesion of Circulation; Administration of Wine; Objects of it; Rules for it; Injections of Æther; Flying Blisters, &c.

There are at present in the house, Gentlemen, a good many cases of fever, to the consideration of which I shall devote a lecture or two; and I may observe that this subject, like that of inflammation, is perhaps, of all those connected with our profession, one of the most puzzling to the beginner.

In order to lessen some of the difficulty, I mean, in investigating the subject, to adopt the analytical mode, that is, to endeavour to divide fever into the lesions which constitute it, and to take up the consideration of each of these in the order of its relative importance, in the production or rather constitution, of the disease. The type of fever, which prevails at present, may properly and characteristically be called *low typhus*. And here the question which naturally suggests itself is—What is typhus? But in order to arrive at the answer, it is first necessary to know what it is not. And I shall here read the case of a girl admitted to the hospital a few days ago, which may assist in enabling us to reach this point.

Mary Redmond, aged twenty-five, twelve days ill; had at first complained merely of very slight headache. Her body on admission was thickly covered with petechiæ and maculæ; pulse exceedingly compressible. Her intellect, however, was unclouded, though dull; the abdomen soft; respiration hurried; but with no evidence of disease in the lungs. In five days after she died, and on examination after death there was found no trace of morbid alteration in any organ of the body, there being an accumulation merely of a quantity of mucus in the bronchial tubes, which is always found to accompany the last struggles, not alone in this, but in most other diseases. The digestive organs presented not the slightest trace of disease; neither the mucous membrane of the small or large intestine had the least appearance of that disease—follicular enteritis—to which the French attach so much importance. The case was, in fact, one of pure typhus, with no local lesion whatsoever.

One point, then, is clearly established by this case: it teaches us that typhus fever is not a local disease. No alteration of structure is necessary to its production. There is here not one trace of any local lesion, which shows clearly that the disease before us consists solely of functional lesions—a fact which is taught to us by the pathology of this single case.

In comparing facts or arriving at conclusions, it is necessary sometimes to accumulate a great number of instances from which to draw an inference; but sometimes a single instance is of more value than the large number, on account of the evidence it affords. It might happen that twenty, thirty, forty, cases of fever would be accompanied with follicular enteritis, yet it would still remain to be proved, whether the intestinal disease arose in the course of the fever, or was the cause of it. If, as I before observed, in a single case, like that just read to you, we find on examination after death no structural lesion whatever, though it may have occurred in other cases, even in a great many, it must in them be looked on as accidental. The lesson which this case teaches us is the first step in the study of the disease before us—a lesson useful not alone as regards the pathology of the disease, but also to the practical physician.

If, in treating a local disease, you find symptoms indicative of approaching death, with, in fact, hardly any prospect of recovery, as in a case, for example, of cerebritis, pneumonia, &c., you might abandon such a case as hopeless; but this should not be as regards typhus fever: there being here no structural disease explains how it is that often, under apparently the most hopeless circumstances, the patient rallies. A person, at the very threshold of death—the action of the heart having almost ceased—in fact, all but dead, is found, in twenty-four hours, totally out of danger. Such can never occur in structural or local disease, but very frequently does in typhus fever. And from it you learn not only a confirmation of what is told by the case before you, but also that, while there is breath in your patient, he is not to be finally deserted—not while there is even a single respiration—until the mucus has accumulated to such an extent as to fill up the larynx itself. This, even as a mere abstract pathological fact, thus comes to be of the utmost practical importance.

Having now determined what fever is not, we come to consider what the disease really is, in doing which I shall endeavour to keep strictly within the bounds of clinical medicine, and would warn you here against theories, not that I would have you refrain from reading works on theory of medicine, for sound theory and good practice are very closely allied, but, for the time, get rid of all theories and hypotheses, and stand at the bedside of a patient in typhus, carrying with you the information just now obtained, bearing in mind that you have no structural lesion to deal with, and that your patient, as I have said, from an apparently hopeless state, may be free from danger in twenty-four hours. What, then, is the disease? Is it a disease of the brain? Certainly not; the post-mortem examination reveals no trace of disease there; and the patient during life was rational, the intellect was unclouded; she was capable of answering correctly questions put to her. Is it disease of the lungs? Assuredly not; for there were here neither the post-mortem evidences of such, nor the stethoscopic evidences during life. It is decidedly not disease of the digestive organs, or some trace of it would be found at the autopsy. Thus, then, you see distinctly what the disease is not.

Let us, still carrying on this mode of unprejudiced examination, turn to the circulating system. We find the pulse exceedingly soft, hardly capable of bearing the slightest pressure. So far we derive information as regards one part of the circulating system; but, in practical medicine, never look upon that system as a single one, but consisting of two important parts; the one comprised by the heart, arteries, and larger veins; but which is the minor system as regards its importance to life, for we know that many living beings are unprovided with a heart, which, after all, may be looked on as a kind of pump which receives the blood on one side and enables it to obtain renewed vitality, while, from the other side, it is sent through the several large tubes to the different parts of the body. The second division of the circulating system is that really of most importance to the physician, and to which sufficient attention is not at all paid in reference to its function in the living body. This is the system with which we have to deal here, and upon which life very often depends. Look to that system in a case of typhus, and you find, first, that all those parts, naturally of a florid colour, from the quantity of blood contained in them, now assume a dark, lurid hue—the cheeks for instance. The darkness tells us here what the philosophical experiments of Hunter told in their way, that the circulation is not carried on with vigour; and in proportion as this system becomes enfeebled, do we collect the signs which are to guide us in treatment. You see the conjunctival vessels engorged, and if you pass from these and the cheeks to the surface of the body generally you there observe over it a mottled hue, and you find it covered with maculæ caused by the distension of the smaller vessels with blood; these latter sometimes giving way, so as to permit effusion into the tissue of the skin constituting petechiæ. It is useful and easy to distinguish between these

two, the pure distension constituting the maculæ, and the extravasation producing petechiæ. Press upon the discoloured spot with the finger, and if it be only distension of the vessels or a macula, the colour disappears to return again; while if it be blood effused into the subcutaneous tissue or a petechia, it remains unaffected by pressure. And here I may notice a practical observation, to which these maculæ have given rise, viz., that in proportion to their darkness is the severity of the disease, a fact which is also in accordance with the views I have here adopted, that in proportion as the capillary system becomes enfeebled, the case also is low and dangerous.

If we pass now from the mere examination of the surface, and turn to the back, and most depending portions of the body, what do we find? that whenever obstruction to the circulation, even in the slightest degree exists, from the mere weight of the body on the skin, the capillaries have become so enfeebled, so utterly incapable of carrying on the circulation, that gangrene is the consequence. The microscope shows us that when the capillaries of a part are so enfeebled by constant irritation as to be unable to carry on the circulation, gangrene takes place, which gangrene is nothing more nor less than the stoppage of the circulation in those capillaries.

Hence it is that in practice our attention is always directed to those parts which also furnish an indication of the severity of the disease, and the moment this distension shows itself we meet it by local stimulants. Here then is another proof that debility is the great phenomenon with which we have to contend. Passing now from these evidences of vascular derangement manifested by the conjunctiva, cheeks, surfaces, &c., if we look to the urine, we find it often presenting a corresponding darkness of colour; it is muddy, albuminous, and of low specific gravity, showing that there is also some affection of the capillary system of the kidneys, permitting an excretion of parts of the serum and colouring matter of the blood with which they are supplied.

We thus very often derive information from an examination of the urine, for though in some of the very worst forms of fever the kidneys are unaffected, still they as frequently are disordered.

If, in addition to the dark colour, the urine is muddy, and does not deposit a sediment, and the fluid is found to be albuminous when heated, it adds much to the severity of the case.

Having carried out these views so far, I must remind you that the capillary system is not confined to those parts which are visible to the eye, or appreciable to the touch, but that as a whole it extends to all the internal organs, and that we have a right to assume that there is a condition of their capillary vessels similar to that which we find on the surface, and why? The urine tells you that there is the same tendency in the kidneys to the escape of blood from them as in the vessels of the skin, which give rise to the petechiæ. As the fever advances, therefore, the capillaries of the lung take on a condition, not such as occurs in common pneumonia, but a state of hypostatic congestion.

We have a right to look upon the capillary system throughout the body as a whole. Suppose it were possible to reverse the organs, and that the external surface became the internal, I can have no doubt but that the internal capillaries would exhibit conditions precisely similar to those of the skin.

Get rid of all hypotheses, analyse the disease as I have told you, and you must arive at the conviction that it principally consists in a want of tone in the capillary system generally, not in a lesion of any one particular organ; and being convinced of the existence of this general lesion, there is little difficulty in accounting for the great debility and symptoms of prostration under which your patient labours.

With these views of the nature of typhus fever, you can now understand the apparent anomalies that belong to the disease. A person may die in typhus fever after eight or nine days' illness, with the intellect remaining perfectly unclouded, the tongue moist, and the evacuations natural.

I remember that, some time ago, several patients were brought to the hospital suffering under typhus fever, from having been exposed to wet, cold, and hardship, on board the deck of a steam-packet; these people lay in their beds in a listless condition. When spoken to they answered rationally. The tongue was natural, and the pulse not more than 70 or 80, and yet the majority died.

The patient dies then of the lesion of the function of circulation. I wish to fix your mind's eye on what really is the phenomenon we have to deal with.

I shall follow up the same analytical course in speaking of treatment, and combine, as it were, with each particular lesion the treatment adapted to it.

In connection with that which we are now considering, naturally comes the administration of wine, which seems involved in so much difficulty, that if you take up the different writings on the subject, you too often rise from their perusal bewildered by the directions you receive. You are told to avoid it in delirium, and yet that wine may be advantageous in some cases: that it may be given if the tongue is moist, or occasionally with a dry tongue when it is becoming moist, and so on; and in the end you turn down the leaf, without any decisive ideas on the subject.

Instead of attempting to reconcile these contradictory statements, or of enumerating the number of functional lesions in which wine may be given, let us stand by the bedside, and ask ourselves what do we give wine for? Is it for lesion of the nervous system? In many cases the nervous system, even the brain itself, is undisturbed. We don't give it for the affection of the lungs or of the intestinal mucous membrane, should such exist. For what, then, do we give it—what induces us to administer it? It is for this one lesion, the lesion of the circulating function, indicated by the condition of the heart and larger vessels, and the pulse at the wrist, on the one hand; the state of the skin and the capillaries of the conjunctiva on the other, &c. Wine is a remedy to which we attach great value in meeting the most important phenomena accompanying our present type of fever. For the support, then, of the cardiac circulation, and the still more important one, that of the capillaries, keeping in view the state of the pulse, and the skin in reference to the maculæ and petechiæ, we give wine. Whether there be delirium or not, whether the tongue be dry or moist, whether the abdomen be soft or tympanitic, it matters not what the state of the other functions is, if the capillaries are in a state to require it, the wine must be given. You are not, I repeat, to mind whether your patient is delirious or not; you are to examine the state of the function of circulation, and to adapt your remedies to it.

It may be combined with the administration of mercury, or with the use of cold or hot applications adapted to the particular lesions requiring them, but give wine for that one lesion, and no other. You will see wine given with advantage where the vessels of the conjunctiva are distended, and they contract for the very same reason that under its use the maculæ on the skin grow pale, the darker ones grow florid, and the petechiæ disappear. Wine as an internal remedy may be considered to act upon the capillary system as camphorated spirit does applied externally. It will sometimes happen that your patient is so debilitated as to be unable to swallow, and you are obliged to raise him up by the head and shoulders, in which erect position the fluid will reach the stomach principally by its own gravity, though he has not sufficient power to swallow it in a lying position. In some of the very worst forms of fever the powers of life have been supported, the function of circulation has been kept from sinking, by the administration of brandy and æther in injections when the patient was dying, when he was on the very threshold of death, and where there was no one cause for it upon which you could lay your hand—let people reason and write as they like—except that which I have dwelt upon.

Another practice of considerable power is the application of stimulants to the skin, for the purpose of giving tone to the capillaries. Blisters, hot turpentine, sinapisms, &c. What do we apply these remedies for? Not for the purpose of counter-irritation, for there is no disease of the internal organs—you find none after death. Two, four, or eight blisters are given to the nurse, not, as I say, for the purpose of counter-irritation, but viewing the capillary system as a whole, they are applied to different parts of the surface every four or six hours, and the effect is carried to the capillaries of the internal organs—in fact to those over the whole body.

The support of this peculiar function of circulation is your object all through. In some cases of maculated fever four or six ounces of wine in the day may be sufficient, while in others thirty-six may be necessary; there is no rule for its administration. A curious fact connected with it, too, is that the lower classes very often require more wine than the upper; the explanation of which, perhaps, is this, that when a very bad case shows itself, such for instance as those on board the steamer that I mentioned a while ago, the debility is so great, that stimulants are required for a longer time, and in greater quantity, than in the upper classes, who are in general not subjected to a continuance of the same debilitating causes acting upon the circulating functions.

ORIGINAL CONTRIBUTIONS.

NOTICES OF BRAZILIAN MEDICAL JOURNALISM.

By Richard de Gumbleton Daunt, Esq., M.D. (Edinburgh),
Member of the Faculty of Physicians of Rio de Janeiro, and Member of, and late honorary Secretary to the Parisian Medical Society.

Pernambuco, Bahia, and Rio de Janeiro all have their separate periodical medical publications, the latter city possesses two journals, one the organ of the Academy of Medicine, the other an independent publication, to which, the contributors are chiefly the younger Professors of the School of Medicine, or the aspirants to future vacant chairs in that body. It appears monthly under the title of the "Archivo Medico Brasileiro," on good paper, and contains from twenty-four to thirty-two pages of royal octavo, the price being sixteen shillings and sixpence annually. It is conducted with some activity, and occasionally a good article appears: the lower third of the first pages is occupied by a feuilleton, in imitation of the "Gazette Medicale" of Paris. In this various questions connected with medical politics, the passing events which interest the dignity or welfare of the profession or the public health, are treated of in the usual style of feuilleton writing and with some ability, and always in a tone of high moral professional feeling. In the first number of the second volume, (that for September, 1845), there does not appear one original article worthy of notice; in the second number, however, the editors have been more happy, and I shall proceed to notice the several original communications seriatim. The number opens with a popular article on vaccination by Dr. Feital, descriptive of its uses, &c., and some notes of its early history, it contains nothing new, but this is one of the subjects of which the truths cannot be too assiduously brought before the public. The second article is a resumé of the actual state of our knowledge as to the causes giving rise to Thermal Springs, and is by Dr. Marinho. The third is an eloquent and energetic exposition, (also ad vulgum) of the dreadful consequences of interment within churches and while various hygienic truths are forcibly inculcated, the writers, Drs Costa and Oliveira, severely criticise the conduct of those who from motives of interest make a tool of the superstition of the people to create an opposition to the formation of extra mural cemeteries. An article by Dr. Guimarvas follows this, on the use of fomentations with mercurial ointment in Peritonitis, and notes of various cases of *traumatic* Peritonitis cured by antiphlogistic means in the Rio hospital. Dr. Marinho also publishes the first of a series of lectures on climate in relation to Thoracic disease, it is, however, occupied with purely elementary notions as to what constitutes climate in an astronomical sense, and does not touch upon geographical climates. We then find the usual well drawn up statistical table of the mortality for the preceding month in the city of Rio de Janeiro by the editor in chief, Dr. Lupa. The remaining article,

and one which I shall proceed to translate at length, is by Dr. Cyprian J. de Carvalho, an army surgeon, and was called forth by the publication of a case of prolonged sleep or coma, extracted from a German Journal, the opinions of the narrator on the physiological state of the subject of the case being combated by Dr. de C. it will serve as a specimen of Brazilian medical criticism.

Translation.—" In order that the fact extracted from the 'Medecinische Zeitung,' in the last number of the 'Archivo Medico Brasileiro,' may not remain for any length of time unique and isolated we hasten to publish the following, which we had occasion to observe twice during the period of our military medical service in the province of San Pedro do Rio Grande do Sul. Seven leagues, more or less, from the town of Bagé, resides the subject of the following case. This female is from thirty-two to thirty-four years of age, never was attacked by any illness, (unless the phenomenon we are about to relate may be considered one), is of delicate constitution, thin and pallid. This pallidness and emaciation, however, only commenced five or six years back; previous to this date she was somewhat stout, and her cheeks presented a healthy color; she was married fourteen years ago, and has a healthy daughter of eleven or twelve years of age. She had the misfortune to be abandoned by her husband about one year after the marriage, and from the affliction thus caused, resulted the following phenomenon, viz.: she is subject at irregular intervals to comatose attacks, which seize her suddenly either by day or night, and endure one, two, and even five days, in which time she neither drinks, eats, nor executes the slightest movement: there are moments, though rarely, when she appears to rouse herself, since she changes her position, and when spoken to gives evidences that she hears, procuring with her hand the person addressing her, but answers nothing, and returns to her former comatose state. On the occasion of our first interview with this patient, (we were then in the company of Dr. M. F. Pereira de Carvalho,) we found her in her usual comatose attack, and examined her leisurely. She was tranquil, the respiration very regular and free, the pulse though weak and depressed, was very perceptible and the pulsation regular; the extremities were flexible, the temperature of surface natural, the palpebræ closed, and the globe of the eye turned upwards, the mouth humid and firmly closed; no casual spectator would have hesitated to say that she was in a physiological sleep—a sleep reparative of the forces. She had been already three days in this state, when at night one of the bands (the head quarters of the army being close to the house) had scarcely commenced to play, when she awoke, sat upright, and with wondering features examined all around her, saluted us, rose and went to the window in order to hear the music better, and passed the remainder of the night in agreeable conversation. The following day the army continued its march, and we lost sight of the case. About one year after this we again saw this female; but now, music produced an effect quite contrary. The army encamped a short distance from the house, and she saw it arrive. By chance the band commenced to play, and the coma seized her almost as soon as the first sound struck her ears; we arrived in a little while at the house, and found her in this state; but on this occasion it lasted but a short time, and was of slight intensity, for at each instant she seized our hand and placed it on her stomach as if accusing some painful sensation at this part; still she was speechless, and on recovery had no recollection that she had been spoken to. We then inquired how she felt, and were answered *that she was much fatigued, and that she awoke thus when she slept much; but that she wondered what kind of sleep this could be, seeing that after sleeping two or three days, as her friends told her, she often awoke still overpowered with sleep; that she presumed it to be some disease, but as she had no pain and ate well, she concerned herself little about it.* We examined her pulse and found it identical with what has been observed in this state of lethargy. We learnt that in the commencement, the simple application of burnt feathers was sufficient to remove this state; now, nothing can effect this but time alone.

"When reading the case reported by Professor d'Outrepont, the above case instantly occurred to our memory, and which, while presenting so many points of contact with his, we never considered as being a state of sleep; and much less as healthy, the female who was the subject of it, though both the peculiar state and the patients, are thus spoken of by Professor d'Outrepont; various doubts arose in our mind on reading the case referred to, which we shall now present, leaving to those better informed the solution of the question.

"The principle characteristic signs of the peculiar condition of the organism to which the name of sleep has been given, are two in number. 1. The cessation of the exercise of the intelligence and of all voluntary acts, or rather the loss of the power of the will over those acts, which may yet be performed while in this state. 2. Reparation of the energies of the nervous system, and fitness for entering on the usual business of life on awaking. These we believe to be the two specific signs of a physiological or reparative sleep. Both, however, must be united to qualify any such state as real sleep.

"This being established, let us analyse the case of Professor d'Outrepont, and let us inquire if such a state as there described, merits the name of sleep.

"In both his case and ours there is entire loss of intelligence and of voluntary motion; fatigue and loss of strength on awaking. In both cases there is then wanting the second and most characteristic signal, that without which, no suspension of cerebral action can be considered as sleep. 'It is,' says Professor Adelon, 'because this last character has been neglected, that so often various morbid states have been confounded with sleep, which alone have in common with it, the loss of all consciousness of the ego.' Thus it has happened to the narrator of the German case; at least we frankly confess, that our intellect is unwilling to accept these phenomena as being the physiological states, as Professor d'Outrepont does by inference, in heading his case, "Sleep of from two to seven days in a *healthy* female." How can we regard as *healthy* a female, the subject of a fact so contrary to the facts of an ordinary physiological state? a phenomenon whose accompaniment is the withering of the individual who presents it, as we saw in the subject of our own case, *we* cannot so think." * *

Two similar paragraphs close the communication, which as they contain nothing different in style to the preceding, or important in matter, I do not think it necessary to translate. This journal cannot fail of effecting some good, as it is extensively read in the interior, and were the selections from the European Journals well made, would be still more serviceable. At present there is a marked want of contributions from the provincial practitioners, among whom, especially in the southern provinces, are many men of much greater natural ability than are usually found in Rio, either city or province. It is to be hoped that the example of their younger colleagues in the metropolis of the empire, may serve as a stimulus to this class. Considering, however, the early efforts of English medical periodical literature, and the comparatively recent date at which it assumed a creditable form, the present medical journalism of Brazil may justly be regarded as far more creditable to the country than *was* that of England.

A series of articles, similiar in nature to the present, will however, place the readers of the Medical Times in a position to form for themselves opinions on this point.

City of Campinos, Province of San Paulo,
Brazil, December, 1845.

ON THE PATHOLOGY OF THE BLOOD.

By John Nicholson, M.R.C.S., Eng.
Surgeon to the Hexham Dispensary.

Introduction.

General Remarks on its Constitution.—The blood is, from its aspect, apt to be viewed as a fluid holding in suspension a number of ingredients, without order, and wanting in proportional quantities. That the serum of one man may contain more *albumen* than that of another; or, that the *clot* may be larger in one case than in another, we readily grant; but, in the same individual the elements exist unquestionably in "fixed proportions." All things else in nature point to this law; and it is scarcely probable that the blood should constitute an exception. If there is no order in its constitution, how are its molecular actions effected, and by what means does it preserve its characters? It possesses in health a specific heat; and why should it not have a specific quantity of each element?

Assuming, therefore, a certain proportion of each ingredient to exist in the blood of every individual, any derangement must, of necessity, cause a corresponding change in the general system. For illustration, let us suppose there were a diminution of the soda which holds the albumen in solution, the consequence would be precipitation of that animal principle; or, at any rate, it would not be able to flow with sufficient facility through the channels destined for its transmission.

Similar would be the result if any acid came in contact with the alkaline base, by which the albumen is dissolved.

On the other hand, suppose the salts of the blood to be materially increased in quantity, the formation of the globules would probably be arrested; or, if formed, they would be rendered imperfect.

If the red particles were much augmented in number, there would be an activity in the system beyond what is necessary to ensure healthy nutrition; and so tend to establish plethora and its dangerous consequences.

But by an excess of serous fluid there would be the very converse of that which a preponderance of globules would develope.

A large proportion of water enters into the composition of the serum—almost nine parts in ten. Suppose, then, it be decreased or diminished, what would result? The former would impoverish the blood and weaken, to some extent, that necessary and vital affinity which holds the elements together; the latter would cause it to be viscid, impede its circulation, and equally interfere with its molecular action.

It is true that we have spoken of the above changes as a mere matter of theory, founded on the principles which physiology and organic chemistry furnish; but the following pages will contain facts to establish their correctness, as well as to prove that the state of the blood bears an important part in the origin and course of disease.

History of Opinions.—From the time of Esculapius to that of Hippocrates, little can be said of the opinions which practitioners held of the nature of disease. With the latter author originated the idea, that derangement of the humours of the body is the starting point of every malady. Galen embraced this theory, and added much by his subtle reasoning and acute observation.

The humoral pathology acknowledges Hippocrates as its father; but Galen was the great means of its celebrity and prolonged reception. His writings suited the taste of the Arabian philosophers, and soon placed these doctrines beyond dispute in that school. Thus we find, by reference to history, that *Serapion, Alkhendi, Rhazes,* and *Avicenna,* were all supporters of the humoral theory; or, that the blood is the seat of disease, as propounded by Hippocrates.

The humoral pathology continued to have full possession of the mind for many centuries: and every succeeding age appeared rather to bring it new strength and support. As Bostock* well remarks "even after the chemists had subverted most of Galen's dogmas, and had produced a total revolution in medical practice, the blood was still regarded as the origin of diseases; and they were ascribed to an acid, an alkaline, a watery, a saline, a putrid, or some other imaginary condition of the fluids." The mathematical physiology also admitted the blood to be the primary cause and seat of disease. Philosophers of this school viewed the particles of the blood as capable of undergoing some change in their physical quali-

*Physiology, page 299.

ties—as in weight, size, or viscidity; by which they thought its circulation would be arrested or impeded.

It is worthy of mention that *Sylvius* professor of Medicine at Leyden, and *Willis* and *Sydenham* of our own country, did not forget the importance of the blood in the morbid conditions of the body. *Sydenham*, however, did not trammel himself, by any theory: but carefully recognised facts as nature placed them before him.

The writings of Baglivi, of Cullen, and of others, caused the state of the blood in disease to be entirely neglected. Hence, arose the opinion, that every complaint must be the consequence of some change in the solid organs. These doctrines, like those of the humoral pathology before them, began to be too exclusively received: and until within the last fifteen years put all consideration of the state of the blood in disease out of the question. Since then, nevertheless, pathology has become so much an object of practical research that exclusive doctrines no longer exercise a tyrannical influence over the mind; because, facts carefully observed, only are received as worthy of credence, and future application. And, in proportion as, the speculative philosophy, has given way to the introduction of recorded observations, so have the doctrines of opposite schools been amalgamated. Physicians of the present day readily acknowledge solids and fluids to be both implicated in the destructive process of morbid action.

The most logical deduction of our own time, is that the solids and the blood are the two bases—the two supports of disease—inseparable elements, —alternately the cause and effect of their natural change.—The solids are but the products of the blood; and, the other humors of the body the result of the combined action of the two.

Modes in which the blood may be rendered impure.—II. That the *blood must necessarily be affected both in a primary and secondary manner* is readily perceived, if we remember that it is the internal source of nutrition, reproduction and animal temperature.

There are many circumstances which will interfere with the discharge of any one of these important functions, and thereby produce more or less physical derangement in the organ to which the duty is entrusted. If for example, the kidney is in a morbid condition, to such an extent as to interfere materially with its purifying function, the blood becomes altered in its constitution; and fatal consequences are too often the result. In like manner the blood becomes impregnated with certain principles foreign to its natural composition, when the liver is the seat of extensive disease.

The large class of complaints expressed by the generic term "inflammation" affords a striking proof of this position; and seldom, indeed, is any accustomed discharge suddenly arrested, or the circulation in a limb cut off without a very manifest effect being consecutively observed.

Inordinate secretion or excretion occasions an alteration in the relative qualities of its proximate elements, equally obvious, as the action of diuretics, or hydrocathartics sufficiently demonstrates.

The *constitution of the blood* also *depends*, in some measure, *on the metamorphosis* of tissues; for the composition of the secretions collectively is equivalent to the elements. Any circumstance which interferes with the constant and necessary change among the particles, constituting the solid organs of the animal body, must without doubt, alter the physical condition of the blood. The secretion of bile is one mode, by which *carbon* is carried from the system; and the kidneys remove superfluous *nitrogen*. The perspiration, saliva, and other products of the glandular system, act an important part in disposing of the elements of the blood—at the same time that they have other grand offices in the economy. In short life is the result of tissual metamorphosis—and the blood is the principal medium through which it is effected.

Substances taken into the body must also bear a fixed relation to the blood as well as to the secretions.

Articles of food must contain the elements necessary to carry on combustion in the lungs, for the production of animal temperature; and on the other hand, elements which supply the place of those particles constantly rendered of no further use in organic structure. If an animal be fed on substances abounding in rich nutriment, the result is, that the system becomes in proportion surcharged; but, if the food contain only a small share of nutritive matter—too little to meet the demands of the economy—atrophy of the organs, and poverty of the blood will be the consequence.

There is a variety of other facts which demonstrate the blood to be the *first* seat of disease. If we inject a noxious substance into the circulation peculiar manifestations result. Thus take alcohol for this experiment; and intoxication is produced: or a solution of strychnia and fatal spasm is the consequence. In these cases the foreign matter is mixed with the blood, and, unquestionably, occasions a change in its composition, as well as in its properties.

It is a vital and organised fluid, and must, of necessity, be affected by matters inimical to health and life, because it constitutes an important and working part of the entire economy.

It would be unreasonable to conclude that the blood is not the primary seat of change not only in these cases, but in the following striking experiment performed by *M. Leuret* on horses.

He injected the blood, taken from an animal labouring under decided "*charbon,*" into the circulating system of other horses, and invariably did he observe the same disease to be formed.

The observations of *M. M. Trousseau* and *Dupuy* are in confirmation of his statement. Analogous in principle to the experiments of *Leuret*, is the exploded practice of inoculation for *small-pox*, and the more recent discovery of *Jenner* for the prevention of the more dreaded form of that devastating malady.

A PRIZE ESSAY ON PURULENT ABSORPTION.

Communicated to the MEDICAL TIMES by THOMAS OTTREY RAYNER, M.D., F.S.A., &c.

(Continued from page 475.)

In what part of the vascular system does the formation of consecutive abscesses commence? what tissue is it that first suffers from the irritating influence of the pus? I can scarcely hope that the answer I shall make to this interesting question will be deemed satisfactory by others, though, I confess, it apppears sufficiently so to me.

It will be necessary, in the first place, to give a brief account of the phenomena of the capillary circulation, as observed by recent physiologists. The blood in its passage through both the arteries and veins is influenced by the law, that the current of a fluid moving forcibly through a tube is much more rapid in the centre or axis of the stream than at the circumference, where it is in contact with the walls of the tube. By virtue of a vital attraction, which exists between the red corpuscles of the blood, these are kept together in the centre of the stream, while a similar attraction, on the other hand, between the walls of the vessels and the colourless corpuscles, retains the latter bodies at the circumference of the stream, their motion being in consequence much slower than that of the red corpuscles; nevertheless, the force of the current in the arteries is so great that they are often hurried along with much velocity, while in the veins, in consequence of the larger size of these vessels, the current becomes so slow that the colourless corpuscles accumulate in considerable numbers at the circumference of the stream, so as sometimes to assume the appearance of a row of epithelial scales lining the tube.

These facts lead me to believe that the inflammation caused by pus in the blood commences by disturbance of the circulation through the *capillary veins*.

1, Because the solid part of pus is composed of round and compact granules, without the ductility of the blood corpuscles, or their facility in sliding over one another, and destitute of the vital attraction for one another which keeps the blood corpuscles in the centre of the stream. Now it is obviously very possible that, notwithstanding these wants, the force of the arterial current may be sufficient to carry the pus corpuscles through the arterial capillaries in the same way as the colourless corpuscles are observed to be sometimes carried, while the same force may, in the veins, be insufficient to produce that effect, the natural accumulation of the colourless corpuscles furnishing at the same time an additional impediment; they may, therefore, accumulate in the veins, and cause stagnation of the blood, and inflammation consequent upon the interruption of the *numerous and important functions* of the *venous capillaries*, which such an obstruction to the free passage of the blood through them must necessarily entail.

2. From the observation of Dance, mentioned in a former page, that upon cutting into a portion of lung, in the first stage of the inflammation that precedes the formation of an abscess, it is common to find one or more "veinules" filled with pus, I incline to the belief that the pus here referred to must have accumulated in the veinules in the manner explained in the preceding paragraph; though possibly it may have been increased in quantity so as to become visible to the naked eye, by inflammation and suppuration in the interior of the veinule itself.

3. The opinion is strengthened by the following experiment, which was performed repeatedly by Cruveilhier. He introduced a small piece of wood into the femoral vein of a dog, and passed it down as far as the hollow of the ham. The animal died on the sixth day, suffering great oppression; the whole inferior extremity was infiltrated, and all the veins and veinules injected with pus. A section of the muscles discovered little purulent points, which proved to be small veins distended with pus, the muscular tissue around them being red and softened, and presenting the same appearance as a lung in the first stage of the formation of an abscess. I confess that this experiment does not appear to me to prove so decisively that the capillary veins are the primary seats of the inflammation caused by the presence of pus in the blood, as it does to its learned author, because it is reasonable to suppose that the inflammation would propagate itself along the lining membrane of the veins, originating with that caused in the main trunk by the piece of wood. It is, nevertheless, together with the previous consideration, strongly confirmatory of the view I am advocating.

But is the rapid formation of abscesses to be atributed only to the mechanical obstruction and irritation caused by the pus in its passage through the capillaries? Or has the pus any quality which determines the inflammation to the effusion of more pus? The question is one of the highest interest and importance; but I am not in the possession of facts enough to enable me to answer it definitively. The following are the considerations which appear to me to bear upon it:—

1. The point established by recent pathologists, that inflammation is a process which differs essentially in its course and its results, according to the tissue in which it is developed, and the causes by which it is excited, now the termination in the effusion of pus, of the inflammation caused by pus, with equal or nearly equal rapidity in all the tissues, seems to indicate that a specific influence is exerted.

2. The difficulty with which pus, especially the solid part of it, is removed by the absorbents, and the tendency which an abscess, once formed, has to increase in size till it finds an outlet externally, favour the same view.

3. The fact that phlebitis is often determined by some epidemic influence of a specific kind, analogous to that by which erysipelas and puerperal fever are produced; this has been noticed by a number of different authors. It was remarked by Dance, that the greater number of the cases recorded in his paper on phlebitis in the Arch. Gen., vol. xix, occurred in the year 1828; three especially of uterine phlebitis within a few days of one another; the first on January 8th; the second, February 14th; the third, February 12th; in all these the accouchement had been natural. Two others of phlebitis from

venesection, commenced, one on May 17th, the other June 2nd, of the same year.

The three cases observed by Mr. Arnott himself, which are recorded in his paper on phlebitis in the Med. Chir. Trans., commenced, the first on November 1st, 1826; the second, January 1st; the third, January 3rd, 1827. It is reasonable to conclude that the pus, in cases like these, must act in a specific manner. On the other hand, the minute globules of mercury, which result from the injection of that metal into veins, always give rise to the formation of abscesses wherever they happen to be arrested, with as much or even greater rapidity than pus itself; and this occurs not only in the lungs, where the air might be supposed to exert its known influence in determining suppuration, but also in the liver and other organs, where the access of air is impossible. It must be recollected, however, that the result depends much on the intensity of an inflammation in all tissues, and that this must be greatly increased by the high specific gravity of the mercurial globule. To obviate this objection I performed the following experiment.

Exp. 6.—A scruple of wheat starch, suspended in an ounce of water, was thrown into the crural vein of a large dog; he vomited immediately after the operation, and had some dyspnœa, but soon recovered and appeared perfectly well. On the seventh day a drachm of wheat starch, suspended in an ounce of water, was injected into the crural of the opposite leg; considerable dyspnœa followed, but no other apparent ill consequence. Six days afterwards he was poisoned with prussic acid.

Post-Mortem Examination.—All the viscera were quite healthy with the exception of some scattered patches of emphysema of the lungs. The microscope detected a few starch globules in the blood.

Exp. 7.—A scruple of starch, suspended in two drachms of water, was injected into the crural of a small dog; the operation caused immediate howling and great dyspnœa, followed by stupor—the animal appearing to labour under great oppression of the brain. He recovered in about half an hour, and continued well for two days, except that he was rather more dull than usual. On the third day thirty grains of starch, suspended in about three drachms of water, were thrown into the opposite crural vein; violent dyspnœa supervened as before, and terminated in about two minutes in the death of the animal.

Post-Mortem Examination.—All the viscera healthy, with the exception, that a single patch of starch surrounded by a slight ecchymosis was found near the surface of the lower lobe of the left lung. The lungs were also extensively emphysematous. The great veins and right cavities of the heart were gorged with blood. Pulmonary artery quite empty. I have performed this experiment in three other instances, but every one in which an attempt was made to approximate the consistence of the mixture injected to that of healthy pus, was followed by the immediate death of the animal.

Dance considers that the extension of phlebitis in the direction towards the heart, is a proof that pus acts as an irritant on the inner coat of veins; but there are three objections to this view, which appear to me to be fundamental.—1. The fact that the inflammation very often extends in the contrary direction; 2. That, as the researches of Mr. Arnott have shown, it generally stops suddenly at the point of junction of the diseased vein with some large branch; 3. The inflammation generally runs to its full *extent* before any pus is formed at all.

PRACTICAL SUGGESTIONS.

By J. Deane, Esq., Chatteris.

Our medical literature is, for the most part, formed by men of leisure, men, too, of vast experience, acquired however with little labour, amidst a concourse of patients very near their studies and their homes. They know nothing of the toil and of the loss of time inflicted on the country practitioner. Their mornings are spent in short rides about their immediate vicinity, and with rare exceptions the rest of their time is spent in literary ease among the wise, both books and men. These are the men to bring out medical truths in philosophical dress—to clothe them in the attractions of classical language—to illustrate and adorn them with facts collected from the collateral sciences, and to make them savour somewhat of the genius and learning so generally imputed to the sons of Æsculapius.

The rural practitioner is not "equal to these things." We soon take the stamp of circumstances and humble ourselves to the only status which they permit. If we mean to present ourselves in the galaxy of talent which spreads itself through every page of the Medical Times, we ought first to persuade a Herschel to prove that some stars are altogether in the rough; and, if positively hemispheres, that some remain in the primitive granetic form and structure, as yet unclothed with alluvial verdure and beauty. The rural practitioner spends his life, Cossack-like, between his saddle, his meals, and bed; and yet *he* might be induced to contribute much, very much, to the facts of the profession. What a noble legacy to the world might be left by some of our most experienced physicians, were they merely to state towards the close of their long and usefully spent lives, the chief peculiarities of practice, about which they have satisfied themselves, so that the hint might be taken by others, and some useful plan adopted in many a forlorn case where the ordinary resources of art are either useless, or very uncertain; or so dilatory as to be hardly worth the name of treatment. This, after all, is the noblest aim of all medical literature. Instead of having book upon book, as we too often have, of the same proposition in a new form, we should have at least the comfort of novelty; and if we had sometimes to reject a premature generalization, we should often receive a valuable addition to our therapeutic agencies.

As a very humble contribution to this sort of medical composition, I wish to bring before the profession, what appears to be a new remedy in Chronic Gleet; if it is an old remedy, it is certainly at present much neglected.

Every surgeon has been at times tormented with the dilatory progress of such cases. I well remember the observation of an eminent physician on this subject: "that one sort of treatment was as good as another, and that time alone would wear it away." We all remember the statement of Hunter, that, "there is something scrophulous in some gleets," which he assigned as the reason of their occasional incurability. The sort of case alluded to, is the following: the inflammatory stage is cured; some weeks have elapsed, there is little or no stricture, and yet the discharge continues. We are quite sure that some sort of local irritation would suit the case, and we have, perhaps, tried all sorts of injections, in all possible modes—strong and weak—frequently and rarely: we have also tried the well-known remedy of blistering the groin or inside of the thigh. Constitutional remedies also have failed. We all know how often the cure of such cases is ushered in by gonorrhœal rheumatism, chiefly in the knee joints. Gleet will often bring on rheumatism in the knee joints, and blistering the knee will often bring on violent strangury. This latter calamity is too frequently the lot of the poor invalid, whose knee requires to be blistered for disease of that articulation. Now, although we do not know by what process gleet will often bring on gonorrhœal rheumatism, we do see some positive reason for the relief derived by a gleet, from an attack of gonorrhœal rheumatism: it arises partly if not wholly from counter-irritation, acting the more rapidly in this case, from the unexplained sympathy between the urethra and the knee joint. It occurred to me three years ago, (May, 1843) in managing a case of chronic gleet which had resisted for nineteen months, every mode of treatment adopted by other practitioners, as well as by myself, that we might obtain this counter-irritation quite as well by a blister around the knee; that with the certainty of art we might act on this sympathy, and obtain an articular irritatoin as useful as any which the uncertain and dilatory operations of Nature might give, with this differential advantage, that by applying the blister, we should most probably obtain strangury, and that by the combined action of irritation relieving the special chronic excitement in the urethra, and of strangury substituting one irritation in the part for another, we might at once free the urethra from disease. I believe the false membrane formed in severe strangury has been recently *discovered*—that is to say, has been recently written about, perhaps it is in this way only, that I did then discover what had been known before, but not written about: I had often seen this false membrane in the urine passed in strangury, and I relied on it as justifying the hope of change in the urethral surface. In this, my first use of the remedy, strangury came on during the night; films of detached membrane were visible in the urine; the gleet was considerably checked by morning, and entirely disappeared never to return, before twenty-four hours from the application of the blister. Encouraged by the history of this case, I have adopted the same plan in at least twenty cases of chronic gleet, and have had nine cases that have yielded as rapidly to the treatment, and not one that was not very plainly benefited by it. In some cases, I have applied the blister twice, and in one three times. I have not had any trouble with chronic gleet, since the addition of this to our other plans of treatment; and although I do not expect for any length of time to remain so fortunate, yet I am quite certain that whoever adopts it in the sort of case which I describe, will find it a valuable addition to the resources of our art. If it has been elsewhere adopted, it has been a part of the "hidden wisdom of the wise," "not to be found in any of the books;" and but for this opinion, I would not have presumed to bring the subject so prominently before the profession.

As I said before, we want some of our old practitioners to tell us their experience in the treatment of disease. I know I shall expose myself among the fastidious to the charge of being miscellaneous, but I wish, at whatever cost, to let our old practitioners see how easily they might make a "book," and that it is no more necessary to keep to one point in scribbling, than to one point of the compass in an ordinary midnight gallop.

What is the best treatment for a certain class of cases, termed "Acute Rheumatic Fever;" the case for which Bouillaud used, Sangrado-like, to adopt bleeding coup sur coup, within an ace of death, and repeated as often as reaction set in? What the result of this practice is, in France, I care not to know: if practised in Cambridgeshire it would be "hominem jugulare," and had better be done from the carotid or innominata, for brevity's sake. It is now thirteen years since I first witnessed Dr. Hue's plan of treating such cases at St. Bartholomew's, and I never knew anything in physic more satisfactory. I have practiced it ever since, and I regret to find no mention of it in any of the numerous practical treatises which I have since read on this subject.

What a variety of plans have been adopted in these cases, and with hardly any result! What tedious illnesses have they not introduced! I have seen scores of them vanish in three or four days, under Dr. Hue's plan of management, *provided the treatment has been commenced with the first decided symptoms of the disease*; and I have been almost as successful in these cases in the humble imitation of so able a preceptor. Before attending St. Bartholomew's, I had been led to prefer the calomel and opium, preceded by venesection, but was soon obliged to make it yield to "the nobler and the better one." My readers (if I should have any) will soon say "with what simplicity the world is governed," when I inform them that Dr. Hue's plan consists in the use of the inspissated juice of the recent colchicum bulb. He recommends the plant to be kept constantly in the soil ready for use, and the pills to be made when wanted. Unless pericarditis be present, venesection is not to be resorted to. No purgative is to be administered unless the bowels are very much confined; and then castor oil, with warm water enema, will suffice. The object of these precautions is to kee

the system fit to receive the colchicum, which might become ineffective if any active treatment were first tried. For an average state of system five grains every eight hours for twenty-four hours, then every six hours for twenty-four hours, then every four hours for twenty-four hours, and then every three hours, until it acts on the system, is the very brief prescription; and it very rarely requires to be carried beyond the third or fourth day. The patient should be seen at least once a day, and the attendants should be instructed to omit the medicine as soon as its action is developed. In most cases extreme exhaustion with diuresis is the only symptom—in some, catharsis—in some, hypercatharsis, in prospect of which contingency, a small dose of laudanum, in brandy and water, is provisionally named as the best remedy. The pulse is in most cases moderated before the lapse of twenty-four hours, and the fever somewhat abates; but no absolute relief is felt by the patient until some such feeling is experienced, as is well known to be the effect of colchicum administered in the ordinary way; and contemporaneously with these exhausting sensations, every trace of the disease will generally disappear. I have never known the small quantity of colchicum used in this way act disagreeably as the vin. colchici often acts; and I am certain that the colchicum prepared in this manner acts on rheumatic fever in the acute form, far more certainly, as well less disagreeably, than any other remedy. The plan will rarely fail, and when it does, the disease very soon yields to a slight ptyalism. It is only in the commencement of the case, however, that such results can be expected: to its subsequent stages the plan is inapplicable, and then cases so much vary that few general remarks can be made. There will also be cases of acute rheumatic fever, to which Dr. Hue's plan will be inapplicable; as in anemic or consumptive complications—in advanced pregnancy—and in all those cases where a prudent practitioner would avoid the colchicum in any form. But with these qualifications, I do think, from having made this form of disease a special study both by the plan of treatment now named, and by the plans in ordinary use in the profession, that few cases of this type will occur in which it will not arrest the disease in such a way as to merit the best compliment that can be appended to any treatment, tuto, cito et jucunde. It is safe, for although I have been familiar with it for thirteen years, I have never seen any evil result from it; and this is the observation of the very distinguished physician whose name I have so often used in this paper. It is quick, generally converting a two-month's illness into an affair of from three days to a week. It is the least disagreeable of plans, for its only effect is temporary exhaustion. It does not relax the system, the ordinary result of other methods; and by rapidly checking the disease, it soon gives the poor invalid the "jocund" satisfaction of placing his agonies among the things that have been.

It is much to be regretted that while some of our metropolitans ramble over the entire civilised world to note down and describe the follies and the wisdom of our great men, it should be left to a "poor provincial" to name a therapeutic fact involved in the clinique of one of our own hospitals, equal to any which our medical annals "can boast through all their dismal dark duration."

QUACKERY IN WALES.

By Evan Thomas Esq.,

Late House Surgeon to King's College Hospital, Fellow of the Royal Medical and Chirurgical Society, London, &c.

M. O. aet. 31—married—the mother of one child; has always enjoyed excellent health; she recovered quickly from her first confinement; the labour, in every respect, a natural one. Attended by a midwife.

In her second confinement she was attended by "quack doctor," who, when first informed, promptly attended, and pronounced her to be in labour, asserting at the same time that it was incumbent upon him to perform an operation; this manœuvre was no more than rupturing the "membranes," though, ever characteristic of the charlatan trickery, he made it to appear something very formidable, as, indeed it turned out to be in its consequences.

For a time the labour pains increased in force and frequency, but they gradually failed till they almost entirely ceased, without effecting delivery; much in this dilemma the poor woman was allowed to remain for two days, when, the worthy sage declared it to be his duty to deliver, at the same time premising that the child was dead. He proceeded to fulfil his promise, having first availed himself of a country blacksmith's dexterity; he had a hook made similar, at the end, to a pot hook (as the kitchen maids I think call it) but having a much longer leverage power. Thus prepared, he succeeded, after oft and repeated efforts in delivering; the child being dreadfully mutilated about its head and face was, of course, still born.

On the day following this savage procedure, I saw this woman, she was then in a very weak exhausted state, complaining of severe abdominal pain and tenderness; placenta still attached, or rather detained at the neck of the uterus; upon examination I could detect no pelvical injury, other than a rent in the perineum. This woman, ultimately recovered; leeches and fomentations, were at first applied to the abdomen, the vagina was daily washed by means of a syringe; water-dressing to the perineum: the inferences which may be drawn from the preceding case, are,

First, Had this woman been left to nature, that is, if the natural efforts of the mother had not been defeated at the outset, the probability, nay, even the certainty of the mother's safe delivery of a living child will not be doubted.

Secondly, Had this woman been under the care of an intelligent practitioner, he would have foreseen the utility of using (if necessary) some other instruments better fitted to her condition, at once obviating the depression which the constitutional and mental distress so prolonged could not fail in producing. The premature rupture of the membranes had a fair share in rendering the labour tedious, if it were not the sole cause.

Thirdly, The miraculous escape, from the most formidable accident which can befal a female, namely: a recto-vaginal, or vesico-vaginal fistula, one or both.

A. R. aet. 39—married, and the mother of eight children. All the former labours have been natural, in none has she needed instrumental interference; in her ninth confinement she was attended by an ignorant midwife, but she was safely delivered of a living child, before the midwife arrived at her residence; the placenta was not yet expelled, and she commenced to disengage it by gently pulling at the cord, but finding the gentler motions failing, she allowed her intrepidity to get the better of her sagacity, and so exercised it, till at last she tugged away the placenta and the uterus with it inverted, the former still adherent, to the latter, a flood of hemorrhage instantly followed, accompanied with faintings, and in about ten minutes she expired, in a convulsive struggle. The placenta owed its firm attachment to the existence of ossific deposits, between the placental tufts, and the lining membrane of the uterus.

Remarks. Even the most sceptically disposed, will not, I presume, maintain two opinions about the immediate cause of the inversion which followed this barbarous procedure: some have so much false humanity about all their proceedings, that, even in such a distressing instance as the above, they would be disposed to turn a deaf ear to the re sub judice, and be inclined, like justice, to the side of mercy; it will but admit of one explanation, in my opinion, which is, that the force so indiscreetly applied was the cause of the inversion, and this with its concomitants, the cause of death. The poor woman was in bed from the beginning to the end of her labour, therefore, strong uterine action added to this, the upright posture could have had no share in bringing about this sad event; besides the uterus did not remain wholly inactive after the expulsion of the child, there being no hemorrhage calling for immediate extraction.

So much has of late appeared in the very clever editorial articles of the *Medical Times*, in favour of the much abused *General Practitioner*, as well as against *Quackery* in every shape and form, that there cannot exist in the minds of the unbiassed, any doubt of the *Medical Times* being the *General Practitioner's* only adviser at this critical period, in medical politics. It strikes me that our legislators are too chary in abridging the liberty of the subject, even, when it may tend to his own destruction.

It remains for the National Association, composed as it is of so vast a number of the best informed in the profession, to frame restrictive laws that shall, let us trust, prove effectual for the safe suppression of quackery.

What would certain of the "pures" have the public believe to be the acquirements of the General Practitioners, judging from Mr. Lawrence's mealy-mouthed effusions? Do not the general practitioners, at least the majority of them, possess as much, if not more, general knowledge of their profession than the pures do? The one is daily called upon to treat diseases requiring the greatest tact and nicety—the whole range of medicine strictly so called. As an obstetrician, he has to decide on the existence of pregnancy, and this is not always free from difficulties; and, to perform the trying and responsible duties of instrumental delivery; he has to decide, by an appeal to his conscience as well as to his experience, whether he shall destroy the life of one to save that of the other, or risk both the mother and the child, with the view of saving both. Nevertheless, the pures must be considered superior as surgeons? Some are, others are not so. A senior surgeon to a London Hospital, an Examiner at the College, was once asked by a junior surgeon of the institution to diagnose, in a case which perplexed him; I happened to be an eye witness, as well an ear witness, to this. The case was a chronic strumous abscess, over the upper portion of the *sternum*, its nature was evident to a very superficial observer: the gentleman pronounced the case, true enough, to be an abscess, and satisfied himself by plunging a very narrow bladed bistoury into it, the escape of the contents fully verifying what he had said. He indulged himself, afterwards, with the following astounding clinical remarks, "That if it were aneurism a puncture would not be followed by any bad consequence" adding "that a bit of sticking plaster would effectually stop the bleeding:" what will be the next discovery? a bit of sticking plaster stop the bleeding from an aortic aneurism!

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE CASES.

FIRST SERIES.

Reported by J. S. FLETCHER, Esq., Student at the Manchester Royal Infirmary.

SURGICAL CASES.

Case IV.

Severe Wound of Knee-joint—Portion of Cartilage torn from the end of the Femur—Foot of the opposite Leg blown off—Severe Contusions—Recovery without the slightest injury to the functions of the Knee-joint.

Joseph Payne, aged twenty-three, a miner, from Woodhead, was admitted into the hospital on the 18th of January, 1845, under the care of Mr. Turner. The persons who brought him state that he was assisting in blasting some rock, when the explosion took place before he had got more than a few yards away from the spot, and he was struck by several very large portions of the rock, which knocked him down, and he was picked up quite senseless. When admitted into the hospital, it was found that there was a large lacerated wound, several inches long, on the inner side of the left knee-joint; there was a quantity of synovia flowing from it, the whole length of the wound communicating with the joint, and a portion of cartilage, about the size and thickness of a half-crown, was protruding from between the lips of the wound; this was connected by a

small portion of synovial membrane to the end of the femur, from which it had evidently been torn or cut off by a portion of the rock. The parts around were much contused. There was rather free bleeding from the wound. The end of the right foot was blown off, all the toes being gone, and a good part of the soft parts covering the ends of the metatarsal bones, which projected from the wound and were bare. On the left side of the forehead there was a large scalp wound, extending down to the bone, which was not fractured. Besides these more serious wounds, he had several less severe bruises and slight wounds over different parts of the body. He was in a complete state of collapse from the injuries; extremities were cold; surface pale and cold; pulse extremely weak and frequent; countenance sunken, pale, and anxious; but he was quite sensible, and answered questions rationally.

He is a fine, robust, muscular man, and states that he has at all times enjoyed extremely good health. He has led a very regular life, has never drank much, has always had good diet, and been accustomed to very laborious work.

He was put to bed, the loose portion of cartilage was removed from the wound at the knee-joint; its edges were brought together by strips of adhesive plaster, and cold wash applied over these. The foot was enclosed in a large poultice, and the wounds were dressed with adhesive plaster.

19. He has passed a restless night; has not recovered from the collapse; pulse is very weak; surface cool; countenance pale and anxious; has passed some urine; makes no complaint of pain except in the foot and knee; there does not appear to be the slightest action going on in the wounded foot; no swelling or increase of heat in the knee Continue dressing.

20. Had some low muttering delirium in the night; he is not so low as yesterday; pulse is more full; surface warmer; tongue slightly furred; some thirst; bowels not moved; passes urine freely; foot and knee same as yesterday.

21. Had a tolerable night, but slept little in consequence of pain from the foot; pulse 102, full and soft; skin warmer; tongue furred; some thirst; bowels moved; passes urine freely; foot painful; no action going on in the wound; knee easy, and free from swelling.

22. Slept little in the night; leg and foot were very painful; pulse 105, and soft; surface natural; tongue moist and furred; thirst; anorexia; bowels open; passes urine freely; is free from pain, except in the foot, the wound on which is quite inactive, and there is much swelling of the leg above; knee quite easy; scalp wound is doing well.

Vespere. Has still considerable pain in the foot; in other respects remains as in the morning.

℞. Morph. acet., gr. ½; Spt. æth. nit., ʒj; Mist. camph., ℥ij. s. s.

23. Had rather a better night; pulse 130; slight increase of pyrexia; bowels rather freely open; says he is free from pain, except some little on the foot, the wound on which remains languid and inactive; knee the same. Rep. haust. h. s. s.

24. Has had a restless night; had severe diarrhœa, which still continues; tongue is dry and furred; much thirst; anorexia; no tenderness or pain in the bowels; passes urine freely; pulse full, soft, and 132, skin hot and dry; he is occasionally delirious; foot and leg painful; the wound is still quite inactive; there is some increase of the swelling in the leg; knee easy and free from swelling.

℞. Tinct. opii, *m*. xxx. h. s. s.

25. Was restless, and had much delirium through the night; pulse is 125, soft, and full; skin hot, but more moist; tongue more furred; great thirst, diarrhœa has continued severe, and still remains so; he has no pain or tenderness of the abdomen; passes urine freely; foot painful; not the least appearance of suppuration; wound is more moist; swelling of leg continues; knee easy; no swelling or increased heat. Rep. tinct. opii.

26. Had some delirium, and was restless through the night; pulse 120, and smaller; skin hot; had much pain in the bowels, and very severe diarrhœa, being up almost every half-hour; tongue dry and furred; great thirst and anorexia; passes urine freely; foot painful; there is a small spot of granulations, and a little pus upon it for the first time; knee easy, no swelling; the right arm was slightly bruised, and is now considerably swollen and inflamed from erysipelas, extending from below the shoulder to the middle of the forearm. To have cold lotion to the arm, and rep. haust. morph. h. s. s.

27. Has continued delirious and restless; pulse 126, and small; diarrhœa continues very severe, and he has much griping pain in the abdomen; other symptoms same as yesterday; erysipelas of the arm has not extended; scalp wound healing.

℞. Mist. cretæ, ℥vj; Tinct. opii, ʒj; M. ℥j omni secundâ horâ sumend.

28. Has slept well, and had much less delirium; the pain in the bowels and diarrhœa have subsided; pulse is 115, hard, and more full; tongue moist, but more furred; great thirst; anorexia; erysipelas of the arm has subsided; foot is easier; it is now almost covered with granulations of a healthy character, and there is considerable quantity of healthy pus; knee quite easy.

29. Has had a good night; no delirium; diarrhœa quite checked; less pyrexia; pulse 114; is free from pain, except a little in the foot and knee, but there is no swelling or increase of heat in the latter. Omit. mist. cretæ and poultice to foot, which was ordered to be dressed with warm water dressing.

℞. Tinct. opii, *m* xx. h. s. s.

Feb. 1. Has continued to improve; pulse 84; is much more free from pyrexia; bowels are quite regular; passes urine freely, which deposits a large quantity of lithate of ammonia; knee is easy. The plasters were removed to-day for the first time; wound is filled up with healthy granulations covered with healthy pus, and there is not any surrounding swelling; foot more painful; wound healthy.

4. He appears much better, but says he has not had much rest for two days; pulse is 82, full, and soft; skin cool; tongue moist, but little furred; less thirst; appetite improving; bowels costive; passes urine freely; foot easy; wound healthy; ends of metatarsal bones separating; knee easy; wound filled up with granulations.

℞. Haust. sennæ co., ℥ ij. s. s.

8. Sleeps well; is free from pain, and has continued to improve; pulse 80, soft, and regular; appetite improves; is free from pyrexia; bowels costive; foot and knee are both doing well; wounds healing at the edges; scalp wound is almost healed.

11. Continues to improve slowly; is free from pain or pyrexia; knee and foot easy; wounds healthy and healing.

13. Had considerable perspiration throughout last night; no shivering; pulse 80, full and soft; tongue clean; no thirst; appetite not so good; bowels costive; passes urine freely; foot more painful, but wound continues healthy; knee easy; wound half healed; granulations on other part pale and languid.

℞. Haust. sennæ co, ℥ij. s. s.

15. Has had a very restless night; was suffering from very severe pain in the right side, with which he was seized last evening, and which obliged him to sit up the greater part of the night; it still continues very severe, is increased by each inspiration, but not by pressure; he has slight cough without any expectoration. In the infra-lateral and lower part of the scapular regions on the right side there is some dulness on percussion; the respiratory murmur is indistinct, and there is a slight friction sound a little higher up; sounds normal over every part of the chest; pulse 103, full; skin hot, but moist; he had profuse partial diaphoresis during the night, succeeded by an attack of shivering, which held him for three or four minutes; this occurred three or four times during the night; tongue furred and dry; thirst; anorexia; constipation; passes urine freely, which deposits a copious precipitate of lithate of ammonia; foot and knee easy; wounds languid.

℞. Haust. sennæ co., ℥ ij. s. s. To have sinapism to side.

16. Has continued to suffer from the severe pleuritic pain in the right side; it was much worse in the night; was increased by paroxysms and by inspiration; pulse quick and hard; surface hot; some thirst; bowels freely open; knee and foot the same. Sinapism gave him some relief, and he was subsequently ordered to have hot fomentations constantly applied to side.

17. The pain in the side is much easier; the hot fomentations, he says, relieved it; he can now breathe with much more ease, and dry cough is gone; pulse 100, soft, and smaller; skin cooler; tongue cleaner; appetite better; foot is more painful; wound is suppurating freely; knee easy; wound healing.

20. Has continued better; passed a good night; almost entirely free from pain in the side, but has a slight cough; pulse 85, full, and soft; skin natural; breathes easily; dulness on percussion over right side quite gone; tongue clean; appetite improves; bowels costive; knee is more painful; there is some little swelling and inflammation around the wound, extending a little down the leg; foot easy; wound healthy. To have warm water dressings to the knee, over the strapping. Rep. haust. sennæ co.

23. Is improving; is free from pain or pyrexia; appetite good, and bowels regular; knee easier; swelling and inflammation around wound subsided the day but one following, and are now quite gone; foot is doing well. To have a generous diet.

26. Has passed two good nights; is free from pain or uneasiness, except a little in the foot; has no fever; appetite very good; bowels are regular; foot more painful; the granulations on the wound are high, its edges are red, and it does not appear to be healing; the ends of the metatarsal bones have separated; knee easy, wound healing. To have foot dressed with strapping plaster.

29. Continues in the same state, except that he has a little more pain in the foot.

March 2. Is improving in strength; has good nights; is free from pain; pulse 80; bowels regular; appetite very good; knee easy, wound almost healed; he has considerable power over the joint, can bend it considerably, and can support some weight on that leg; wound on foot is more healthy, and is healing.

4. Is complaining of some headache; pulse 75, soft, and regular; skin natural; tongue clean; no thirst; bowels regular; appetite very good; knee is very painful, it began yesterday; there is a small abscess forming on the inner side of the ligamentum patellæ, over the head of the tibia; the wound appears healthy; wound on foot cicatrising at the edges.

6. Headache has ceased, and he appears pretty well in health; the knee is easier; the abscess was opened yesterday, and discharged a quantity of healthy pus; the original wound is healing. To have one pint of porter daily,

11. Continues to improve in health, and gains strength. Knee has been quite easy; wounds are as near healed as possible; foot easy; wound gets somewhat less.

16. General health is daily improving. Knee easy; wounds are perfectly healed; the joint has its natural shape, and he has some degree of motion in it; wound of foot heals very slowly.

25. Continues pretty well in health. Knee easy; foot is easy; wound healing.

April 3. Continues to progress favourably; he now gets up, and moves about the ward; says he feels much stronger. The knee continues easy; he has a considerable amount of motion in the joint, which he exercises by using passive motion daily; wound of foot is less.

15. Says he feels quite well of himself. The foot has been rather painful; wound has been very languid, and is almost stationary—a small portion of bone came away yesterday; knee easy; he gradually gains power over the joint, and can now bear without pain the whole weight of his body on that leg.

22. Says he improves in health and strength. Foot has been uneasy; wound has been looking irritable and unhealthy, there has been a considerable discharge of the serous matter from it; knee improves daily. Omit strapping to foot, and to be dressed with ung. zinci.

27. Foot is easy; wound is looking much better; it is cicatrising at the edges, and granulations are healthy; knee improves; health continues good.

May 5. Has continued in tolerable health. Foot healing slowly; he daily gains more strength and power over the knee-joint.

17. He has continued in the same state, the foot healing slowly, and knee improving, until within the last day or two, since which time his appetite has been falling off a little; in other respects he

remains the same in health, but the wound on the foot is looking languid, and is not healing at all.

21. Is up and moving about the ward as usual, but appetite is not good; tongue is clean; bowels regular; pulse full and soft; passes urine freely, and is free from pain, except a little in the foot, the wound on which looks worse; granulations are pale and flabby, pus is thin and sanious, the edges are of an unhealthy red aspect and are ulcerating.

22. He had an attack of rigors this morning, which was followed by some griping pain in the abdomen; vomiting and diarrhœa; tongue is furred and dry; he has thirst, anorexia, and frequent inclination to vomit, with alternate attacks of hot and cold; pulse is quick, full, and soft; skin hot; passes urine freely; foot is easier, wound the same.

R. Mist. amm. acet., Mist. antimonialis, āā ℥vj; M. ℥j omni tertia horâ sumendâ.

24. Is considerably better; is free from pain in the abdomen; tongue is cleaner and moist; no thirst; anorexia continues; bowels more regular; pulse less quick; foot easy; wound less languid, and seems larger; knee continues to improve; he daily gains more power of motion over it, and can now walk upon it very well. Cont. mist.

27. Is free from pyrexia; tongue is clean; appetite is improving; bowels are regular; passes urine freely; foot painful; wound languid, and much increased in size by ulceration of edges; it discharges a thin sanious matter. Omit ung. zinci. Apply lotio cupri sulph., and to have it strapped again.

June 3.—Says he feels better of himself; tongue is clean; bowels regular; appetite improving; pulse natural; wound on foot is now looking more healthy; he has now gained the normal use of the injured knee; he can move it freely in every direction without suffering the least pain or inconvenience, and can support his weight and walk upon it with ease; in fact, he says it is quite as good, if not better, than the other, which is somewhat stiff from lying so long in one position. He was made an out-patient, and left the hospital.

REMARKS.

The aspect of this case at the time of his admission was most unpromising, and little or no hopes could be entertained of his ultimate recovery; but the result of the case shows how far a good constitution will bear a man up against severe injuries. The severe shock which he received from the injuries, aggravated, no doubt, very much by the opening and wound of so large a joint as that of the knee, caused such a state of collapse that it was even doubted whether he would overcome it. It is remarkable the effect which the opening of a large joint has at times upon a person previously in good health; it will sometimes bring on instantaneous severe collapse, hence one of the dangers of operations upon them. Supposing him to overcome the collapse, it was probable that with reaction there would be severe inflammation of the joint set in, and he would again have to contend against one of the most dangerous consequences of injuries to joints; fortunately for him, however, this did not occur. Inflammation of the joint was probably prevented first by the mode of dressing adopted, by which the wound was closed as perfectly and as soon as possible, avoiding the use of sutures. These are circumstances to be observed in the treatment of all wounds of joints, and, when adopted soon after the injury, contribute much to the ultimate recovery. The severe injury of the opposite foot and other injuries, with the supervention of severe diarrhœa immediately on the first occurrence of reaction, were all circumstances which may be said to have acted as concomitants, and to have directed Nature's efforts to other channels than to the setting up inflammation in the joint. To have checked the diarrhœa at first would have been to allow of the setting in of severe reaction, and with that probably of severe synovitis; it was much better to allow this to continue, so long as it was compatible with safety, and then to check it, and not before. The effect which this had in keeping in check the action in the wounds, was visibly shown in that of the foot, as will have been seen from the report of the case on the 28th of January, and a few previous days. It thus assisted to accomplish what the surgeon would have sought to do by the use of the lancet and other means. A moderate degree of inflammation was necessary for the repair of the injury to the joint; it was an excess of this that was to be feared, and it is its moderation within due limits which is the grand object of treatment. If the inflammation be very severe, it may terminate in one of two ways—either it may cause such injury to the joint and constitutional disturbance as to terminate fatally; or more frequently it will cause such injury to the textures of the joint as to result in anchylosis; this latter was the most fortunate termination expected in this case, considering the injury already done to the cartilage and other parts; but from the reports of the case it will have been seen that there was little or no inflammation resulting, that the wound healed kindly and rapidly with very trifling discharge, that he suffered no pain from it of any moment, and that he ultimately recovered the full and free use of the joint, much to the surprise of all who saw the case. The small abscess which appeared about the knee in the latter part of the case, was confined to the integuments, and was prevented extending further by being timely opened.

The slight attack of pleuritis which occurred, proved of trifling import, as it was rapidly recovered from. The wound on the foot was healing slowly and kindly for some time, but ceased to do so after he had been in the hospital some months; at the same time he began to suffer from anorexia and slight pyrexial attacks, most probably resulting from long confinement, and the air of the hospital, so that a change of air would be productive of benefit.

This case points out to us the fact, that in some severe wounds of joints, where amputation of the limb would formerly have been adopted, we may, by immediately and accurately closing the wound, and this if possible without sutures, keeping the limb perfectly motionless, and directing our efforts to the checking of inflammation, if it appear, occasionally succeed in saving the joint; and it offers an encouragement for the trial of this where even latterly it would not have been adopted.

MANCHESTER EYE HOSPITAL.

By A. W. Close, Esq., Grosvenor-street, Manchester.

Since I wrote my last communication, (page 10) I have observed that Mr. Lawrence in his "Treatise on Diseases of the Eye," comments thus, on Milton: "Even our great poet, who might have been supposed to find every alleviation and resource that such an affliction admits of, in his highly gifted mind, and the exhaustless stores of knowledge with which it was furnished, repeatedly reverts to his blindness, and always in a tone of *anguish* and *despondency* characteristic of recent misfortune." How he could draw such a conclusion in the face of the heroic declaration of Milton, "I will, since it is God's pleasure, rather *rejoice* than repine at being blind," I am at a loss to conceive.

As I am about to discuss in these reports, a mode of treatment of purulent ophthalmia, concerning which, there is a diversity of opinion amongst ophthalmic surgeons. I may *in limine* remark, that I am no partizan. I have brought to the investigation, an inquiring, but an unprejudiced mind. Of Mr. Walker, I know but little, save in his capacity of a provincial ophthalmic hospital surgeon, and from his published works. In general practice he is my competitor and rival. Of the metropolitan surgeons, whose names I may have occasion to mention, I know as much, and I must confess that I have entertained strong feelings of respect for their professional abilities, in connection with my alma mater, the Royal College of Surgeons of London. I may not say, as it has been poetically sang of a good man, my "failings lean to virtue's side," but I may say as the editor of this Journal, and many of my professional brethren of this town can testify—my affections have leaned to the side of the college and its ministers. I am not then, it may reasonably be supposed, inclined unfairly or maliciously to criticise any points of practice which they may individually advocate. No cause have I to serve but that of truth—no result to desire but the real practical advancement of the profession—in the promotion of which, names and persons are not of so much moment as their published thoughts and practice. Having professed my attachment to the college, I must add, in justice to myself, that when it ceases to be a *college of gentlemen*, every tie will be severed which binds me to it. I can hardly believe that an individual holding the responsible offices of councillor, examiner, metropolitan and hospital surgeon, can have acted as Mr. Lawrence is reported to have done. No doubt he will take an early opportunity of setting himself right on this matter with the profession and the public. If not—if the allegations remain unanswered and unnoticed, silence may be construed as the admission of their truth, and if so, Mr. L. had better retire at once to some hamlet on the borders of a fen, where he may learn to distinguish "geese" from men.

I will now proceed to the more proper matter of this report. What is the best mode of treating gonorrhœal and purulent ophthalmia? First, I will cite Mr. Walker's views, afterwards, I shall give numerous cases, not selected, but as they have consecutively occurred since I became an eye-witness of the treatment of these diseases at the Manchester Eye Hospital. Mr. Lawrence, in his work on the Venereal Diseases of the Eye, thus expresses his views on the treatment of gonorrhœal ophthalmia: "The only chance of arresting this violent disorder, and preserving the eye from its destructive effects, is afforded by the boldest antiphlogistic treatment; particularly by the freest abstraction of blood, generally and locally. We must bleed largely from the arm, and take blood by cupping on the temples, or by numerous leeches applied round the part; and these measures must be repeated at short intervals, until the vascular congestion is relieved, and the attendant pain removed. The other parts of the antiphlogistic treatment must be combined with this free abstraction of blood; but our great reliance must be placed on the latter." On these views Mr. Walker remarks, "The reader may be curious to know what were the results of that treatment in the hands of so able and zealous a practitioner. I will furnish him with a brief summary. Of the fourteen cases, nine had the disease in only one eye: six of these were lost, and but three recovered. The *other five* were affected in both eyes: of these, one *lost both* eyes; two *lost one* eye; one *recovered both* eyes, with *imperfect vision;* and *one* only recovered completely. So that of the whole fourteen cases, but four can be said to have properly recovered." This is certainly very valuable evidence as to the effects of antiphlogistic treatment in gonorrhœal ophthalmia. This gentleman (Mr. Lawrence) however, "infers not that antiphlogistic treatment is incapable of arresting the inflammation, but that it has not been employed to a sufficient extent; and if I had to treat (he continues) some of these cases again, I certainly should bleed more freely. I think that as much blood should be taken from the arm as will flow from the vein, and that the evacuation should be repeated as soon as the state of the circulation will allow us to get more." And by way of encouragement, he then proceeds to favour his readers with the following quotation from Mr. Bacot on this subject, who heroically observes:—"These are cases which defy all the usual etiquette of regular and ceremonious visits. If we wish to save our patient from the destruction of his vision, we must scarcely depart from his bedside until the inflammatory symptoms are controlled. The lancet must be hardly ever out of our reach, for if ever there was a disease in which blood may be taken away without limitation, it is this." But this is not all: Mr. Lawrence calls in further testimony in corroboration of his views. "Mr. Wardrop informed me (he adds) that the only case of gonorrhœal opthalmia he had seen, in which the eye was saved, was that of a young woman, in whom venesection was repeated as often as blood could be got from the arm. She lost 170 ounces in a few days, and looked as if every drop

of blood had been drained from her body; the skin having nearly the hue of a wax candle." 'As the best commentary I can perhaps offer (says Mr. Walker) on the extraordinary statements here made, as well as to prove the correctness of my view as to what constitutes the proper treatment of this disease, I will now give the history of a case which has recently been under my care; in which the eye was saved by an equally simple and rather less dangerous practice." Mr. Walker then gives the following case.

"Case.—Mr. A. at 19, apparently in the enjoyment of full health, called upon me on the 1st of November, to consult me relative to an affection of his left eye, which had commenced on the preceding day, and which exhibited the following symptoms:—the palpebræ, particularly the superior, were much swollen, and very red. On endeavoring to separate them, there was so much tension as to render it difficult to obtain a view of the eyeball: only the inferior portion of the cornea could be seen, and on it was observed a slight appearance of ulceration, as if in the incipient stage, and quite superficial. The conjunctiva of the inferior portion of the eyeball, was in a state of the most violent inflammation, attended with excessive chemosis, and bulged forwards between the separated margins of the lids. There was a considerable discharge of a thick muco-purulent fluid, which occasioned the tarsal margins frequently to adhere, and there was also a good deal of lacrymation. He had not much pain about the eye, nor was there any constitutional disturbance. The right eye was unaffected. Seeing that it was a decided case of purulent ophthalmia, and confined to one eye, I inquired if he had any gonorrhœal discharge? This he at first denied, but afterwards admitted; and on being further questioned, said that he was not aware of having brought any of the gonorrhœal fluid into contact with the eye, although he appeared to be impressed with the idea, that there was some connection between the two diseases. I immediately applied the *nitrate of silver* to as much of the conjunctival surface, as could be got at, allowing it to remain a short time in contact with it, particularly with the chemosed portion at the inferior part of the eyeball. This produced very severe pain, which continued for about half an hour, at the end of which time he returned home. I advised him to remain at home, indeed, to keep to bed for two or three days, and to have the lids very frequently fomented with warm water. I also prescribed four grains of calomel, h. s. and a draught of the inf. sennæ, cum magn. sulph., seq. mane. The next day I visited him at his own residence, and found the eye much the same as on the previous day. The *nitrate of silver* was again applied, and the other remedies ordered to be continued. On the *third day*, the swelling and tension of the palpebræ were so much diminished, as to admit of their being fully separated, and the whole of the cornea to be exposed to view. The ulceration was found not to have extended; the bulging portion of the conjunctiva had subsided; and the vascularity was much diminished. The discharge was still considerable, and of the same character: the bowels had been kept open by the medicines before prescribed. The warm water was found to be grateful. The *argent. nitri.* was again freely applied to the conjunctival surface of both lids. On the *fourth day*, the eye appeared still better. The *nitrate* was again applied. On the *fifth day*, he was so much improved, that he came to see me. The palpebræ were now nearly of the natural size, the chemosis gone, but the conjunctiva was still very vascular, and the ulceration of the cornea not quite healed. The discharge was diminishing, though still free; he complained of no pain, and his vision was not materially impaired. The nitrate was again applied. From this time the nitrate was applied every other day until the *ninth*, when the eye appeared so much better, that, at his urgent request I gave him leave to go into the country for two or three days, on some particular business. On his return, on the *thirteenth day*, I found all the symptoms aggravated: the swelling and redness of the palpebræ, the chemosis and the discharge had all returned; but not quite to so great an extent as at first. Several opaque spots were observable on the surface of the cornea, which looked exceedingly dim, more particularly at the lower portion. Vision was now more obscured, than at any previous period of the existence of the disease, as he could scarcely discern any object with this eye. The *arg. nitr.* was reapplied, the aperient medicine to be repeated daily, and the eyelids to be frequently bathed with the warm water. The *arg. nitr.* was now applied daily, until the *seventeenth*, when the condition of the eye had again become much improved: the chemosis was entirely gone, but the conjunctiva was still very vascular, the vessels encroaching slightly upon the circumference of the cornea, and forming a red zone around it; the opacity of the cornea was all but gone, but little discharge escaped, and vision was very distinct. The *arg. nitr.* was applied rather lightly, and to the inferior eyelid only. On the *twenty-fourth*, the disease had all but disappeared, slight vascularity, and a little roughness of the conjunctiva of the inferior eyelid, alone remaining, the sulphate of copper was applied. This patient called upon me again, in about a fortnight from the last named date, when the eye was quite well."

"I have given rather fully (Mr. Walker proceeds) the details of the above case, because I consider it a very important and instructive one. It will be seen that the treatment was commenced on the second day of the attack; all the symptoms were of an aggravated character; ulceration of the cornea was already apparent; the chemosis was developed to the fullest extent, and the tension of the palpebræ was excessive; this last symptom, Mr. Lawrence considers to denote the worst kind of case. This case, then, certainly not mild or trifling, was cured without the abstraction of a single drop of blood, and with no other local applications, than the nitrate of silver to the conjunctival, and warm water to the cutaneous surface of the lids."

REVIEWS.

On Tubercle of the Brain in Children. By JAMES MAXWELL ADAMS, L.R.C.S.Ed. [Submitted to the Faculty of Physicians and Surgeons of Glasgow, when candidate for admission into that body, in conformity with the regulations for the admission of members.] 8vo. Glasgow, 1846. pp. 32.

The subject of which this little pamphlet treats is one of the most interesting and important departments of pathology, though, strangely enough, it has hitherto received but a limited share of attention. Monro and Abercrombie were amongst the first to give it a consideration in this country, but not by any means in a systematic or well-digested form. More lately it has been investigated with much care and skill by Dr. Hennis Green, who has contributed very largely to its elucidation. On the continent it is more familiar to pathologists, and it is to our indefatigable brethren in that quarter that we are mainly indebted for what we know concerning it.

The monograph before us does not come with the intention of advancing any new facts of consequence upon the subject, but rather to put together the scattered records of other writers, and so bring them within an available compass, and make them tolerably easy of reference. And its author deserves that it should be said of him that he has executed his task well. We are free to say that his production does great credit to his literary research, as well as to his scientific knowledge and bed-side judgment.

The symptoms of acute tuberculisation of the brain are thus described by Mr. Adams:

"During a state of ordinary health, and after some evident exciting cause, as a blow or fall, or more frequently when convalescing from some infantile disorder, a child is suddenly seized with convulsions, headache, or vomiting, followed often by paralysis of the lower limbs, or one side of the body; The pulse becomes quick, and the child is feverish; various lesions of the organs *(functions?)* of sense supervene, as strabismus, loss of sight, of hearing, or diminished sensibility of the cutaneous surface of the side of the body; the bowels are commonly constipated, and the appetite fails; the intelligence meanwhile remains good. The child continues in this condition for a period varying from a few hours to a fortnight, and seldom longer than three weeks, and death finally ensues, attended with coma or convulsions."—pp. 13 and 14.

The expression of the face in these cases appears to be a valuable diagnostic sign. Mr. Adams dwells particularly upon it, and quotes from Gerhard, who says, "it is so peculiar, that the sister of the wards at the Children's Hospital was accustomed to distinguish the disease with much accuracy from the mere aspect of the child. The face is pale, with occasional flushes of redness on one or both cheeks; mouth frequently a little deviated; lips compressed or half open; the eyelids are almost invariably closed or a little separated; nostrils widely dilated. But the most distinctive character is the peculiar listless expression, with occasional grimaces and movements of the lips, as if tasting an article of food; this character does not admit of description, it must be seen to be appreciated." (p. 25–26.)

Unhappily, the diagnosis of the disease, and a knowledge of its correct pathology, aid us not at all in its treatment. It is one of those ailments that seem fated to be beyond the influence of all our remedies.

TO CORRESPONDENTS.

We have to thank Dr. Davis *for his valuable communication.*

Mr. Arlidge.—*The mistake, indeed, is a ludicrous one, but not one, we should imagine, likely to be of much importance.*

S. M.—*We have had no practical experience of either of the systems referred to, and we decline giving our correspondent any advice on the subject. Cramming for examinations is generally only the resort of those who have neglected the opportunities afforded them for obtaining sound and available information. To stammer through an examination merely, is not, or ought not to be, the aim of a medical education. S. M. should bear in mind that he may, as a medical practitioner, have the life and health of thousands dependent on his skill and information, and serious will be his responsibilities should he, by omitting to gain useful knowledge, waste time never to be recalled, and neglect to fit himself for his duties.*

The Physiological Pons Asinorum *is incomprehensible.*

Amicus Humanitatis *is anxious for the formation of the general medical annuity fund, to which he would himself become a subscriber as far as his means allow, and which he feels confident would be supported by numerous members of our profession. Our correspondent suggests that the rich members of the Council of the College of Surgeons should set an example to their poorer brethren by subscribing handsomely.*

A Constant Reader *in the* Pharmaceutical Number *of the* Medical Times, *will find his request complied with in the present number.*

H. B.—*A minor cannot enforce his claim for surgical attendance. How could a minor have become legitimately a member of the profession?*

M. D.'s *unfavourable opinion of Dublin as a medical school is not reciprocal.*

Numerous correspondents who have addressed us in terms more or less deprecative of the mode in which Mr. Liston secured the succession to Mr. White, as college examiner, are thanked for their communications. We have anticipated their general wish.

Mr. Madden.—*There is no such relationship. The folding depends partly on the booksellers and newsmen. Care, however, shall be taken at the office to leave nothing to their accuracy. The paper will be sent.*

Mr. Danford.—*The parish giving the order for medical relief can enforce payment on the parish to which the pauper belongs. The medical officer should be paid by his own parish.*

Mr. Wilde *shall have a private note.*

N. F. V.—*Six years' standing in a foreign university is requisite for the foreigner seeking a Paris M.D.-ship. He must also undergo five examinations and defend a thesis.*

.. ... must avoid such empirics as he would the worst forms of danger.

A number of correspondents have addressed us on various subjects which are each, in their turn, to meet with due consideration.

Numerous books for review have also been received—the most important being Mr. Phillips' *new work on Scrofula. They will all have due consideration.*

THE MEDICAL TIMES.

SATURDAY, APRIL 11, 1846.

Multa ferunt anni venientes commoda secum
Multa recedentes adimunt.—HORACE.

WE may advance as an established fact that the Medical Profession was never in a more unsatisfactory state than at the present moment. It presents a picture of disorganisation complete as could have been limned by a Dante or a Milton. It is a confusion daily worse confounded, each hour showing in its lowest depth a lower still. Physicians—Surgeons—General Practitioners—Apothecaries—Druggists—empirics—form one moving incongruous social mass—mixed, blended, and interlaced—like animalcula under a microscope—in so curious and complex a fashion, that the power of distinction and definition fails us, and we give up the task of classification in disgust or despair. Each seems a part of the other . every one performs the office of all; words and titles are given or taken that have no affinity with functions—the public is bewildered with discrepancies nobody can set right; and thus a liberal and worthy profession made a home to charlatans and a hiding place to knaves, becomes a suspicion to society and a disgrace and discomfort to itself.

Entire as is the anarchy that marks the body practising medicine, it is not more so than the conflicting imbecility existing among the Institutions appointed to protect the science itself. If we turn to the College of Physicians we discover at once that it has failed to reach its destination, and, with wonderful capabilities, has yet contrived *not* to be the College of English Physic. The Fellows, discontented with things as they are, are not less so with any proposal to make them as they should be. They are at feud with the Licentiates—and these are in mutual feud with themselves as extra- and intra-urban practitioners, and in fixed antagonism to the rulers of what is their college only in name. In the College of Surgeons all is feebleness, indecision, and folly. With something wise always being deliberated on, we have something foolish always being executed. The Members are in the utmost disgust—the Councillors in the utmost indecision and anxiety—injury on one side is as severe as ineptitude is enormous on the other—everything is in the worst possible plight—yet there is no hope of a remedy. The Society of Apothecaries, again, to whom a great portion of the active part of the Profession is attached, are, by their own distinct avowal, in a position not less unsatisfactory or unfortunate. They have, it is true, raised professional acquirements, and *endeavoured* to prosecute empirics; but their declaration is decisive that although the only depository of the legal power, they cannot abate, much less suppress, quackery; and that, although raising the qualifications, they cannot equivalently support the social station of their licentiates. In Ireland and Scotland matters are not more cheering or satisfactory. In all three divisions of the empire agencies are at work to increase the evil, to make still more intolerable the disorganisation—yet how stand we for a remedy?

Government has abandoned the task. The work of cure has been avowed to be above the power of her Majesty's ministers. The hopes from that quarter—once so rife—are blasted. The evil is not only admitted, but it is declared too great for the Government to grapple with.

Are we, then, hopeless? Just the contrary. The very extent of the evil—the very absence of the remedy we had hoped for—gives us the consolatory assurance that a change is as near as it is inevitable.

We are at the beginning of wisdom—just learning to see whence deliverance really is to come—just commencing to entertain the only conviction that is likely to achieve something substantial. We are discovering that whatever is to be done, is to be done, not from without, but from within; that the blow for improvement is one that cannot be delegated, but must be struck by "ourselves." The objection is urged that the work is vast and requires an efficient agency. For that reason, we reply, should we leave to no others its performance. We are above all others interested—we are above all others cognisant of the circumstances—we are not deficient in numbers—individually, we do not want either influence or intelligence; we have, then, all the elements about us to accomplish every amelioration that is desirable, if we will only give them fitting employ. If medical men concentrate and use aggregately the powers diffused among them individually, we know of no righteous object sought for by them which cannot be obtained. In the abandonment of legislation for us by Government, there is still, in this topic, matter of congratulation:—what ministers have declined to do we can have done if we please, and, what is more, have it done by the parties from whose agency we should deduce most of our pride—ourselves. If we fail, then, can we say we deserve to succeed, or merit what we seek?

We are not discouraged by the retrospect of how little, during the last twenty years, we have yet effected. The truth is, we have not *tried* to effect much. Till of late there has been no professional movement. We have had, for the most part, but a *Charlatanism* of effort. We have had great noise, much bluster, magnificent promises, turgid *denunciations*, and the Profession has smiled, or sighed, or gaped at the prominent trickeries of one medico-political mountebank after another, as he propounded his remedies from one associated stage after another. But, as a whole, we have taken no part in the performance. Till of late, we have been but the disdainful spectators or well-meaning dupes of the Charlatans, accomplishing nothing, save to aid them to move into squares, or keep clear of less agreeable localities, by their abounding sympathies with professional miseries. Like Holloway's ointment to an ulcerated leg, the gain in cure or cash has been on the wrong side—never on that of the much-bewailed sufferer. Every word of kindness, every speech of sympathy, was so much hard money lost without consideration, and the only men that thrived on floods of benevolent grief were, oddly enough, the "professors" of political medicine that so liberally gave vent to them. They became rich "*a force de soulager les pauvres*," and, alas! the poor were nothing the better for it. We freely grant that the "London College of Medicine," and the "British Medical Association," and the "Medical Protection Assembly," and the Society which, formed at the Hanover-square Hotel, held its meetings at the Princess' Theatre, and the "Committee of Associated Surgeons"—which, like figures from a camera obscura, have come across us in rapid succession like shadows, and like shadows departed—have accomplished nothing for the Profession, notwithstanding all the hopes they were adroitly made to excite, and all the money they were just as ingeniously made to consume. But it would be to libel both the capabilities and the principles of our body to suppose that these bubble companies for medico-political agitation either represented our feelings, or possessed our support. The great mass of medical men were not in them, and the majority of those that were, were not of them. The very cause of their failure is the very ground of our hope for the future. As they failed for want of professional support, we must succeed now that we are beginning to command and organise that support.

Now, how stands our actual position? We affirm there never was a moment when we could better afford to be taught that our hopes of re-organising and elevating the medical community must depend on our own exertions. The repellant and mischief-making associations—"airy nothings"—to which unprincipledness had lent all the little "*actuality*" they possessed viz.:—"a local habitation and a name"—have burst like bubbles, leaving scarcely "wreck behind." A vast obstacle to large combination is thus removed. The adverse side to professional exertion could not—so to speak—be more favourable. How fare we otherwise? Two vast associations—respectable both from the character of their leaders and the number of their members—stand organised at the hands of the Profession, ready to be set in motion whenever the members please—to take the direction which the bulk of our brethren may prefer, and having, if once brought into combined action, the power of achieving actually all the improvements sought for. We have only to will a complete remodelling of professional government to secure it. Whatever we may desire as to classification—whatever seek as to future qualifications—whatever aim at for administrative government—all is within our reach if we wish.

Possunt quia posse videntur.

The conviction of our ability, united to an inclination for its use, is all that is needful. In the existence of the Provincial Medical and Surgical Association, and, above all, in the National Association—the one with nearly two, the other with nearly five, thousand members—we have all the machinery for giving practical effect to our principles. It is for us to say whether we will set it in motion. The present position of medical affairs—as we have endeavoured to indicate—is peculiarly favourable for a decisive movement. The Council of the Provincial Society should no longer hold back. They have a weighty responsibility, and its full discharge, if we mistake not, calls on them to be up and doing. The forth-coming great meeting of an Association they have every reason to sympathise with, offers a good opportunity for a friendly intercommunion. The day is come when the question must be decided—whether, leaving the present corporations as they stand, an institution shall not be established, more national in its character and more scientific in its tendencies, in which every legitimate practitioner—no matter which of the two divisions of medicine he practices—shall be included. The great meeting of the National Association, to be held on the evening of the 17th instant (Friday next), at the Hanover-square Rooms, will do much to express the general opinion on this subject; and we should be rejoiced to find

a concurrent movement under the direction of those who are answerable for the efficiency of the older society in the provinces.

———

——"Quid nobis certius ipsis
Sensibus esse potest? —qui vera ac falsa notemus?

A SINGULAR insurance case was tried at Warwick last week the chief details of which we have no doubt will prove interesting to our readers, inasmuch as they bear an important relation to the responsibilities of insurance companies, and to the duties of their examining officers.

An action was brought by the assignees of a person named Scott, for the recovery of two thousand pounds, a sum for which he had insured his life in the Imperial Office, London. The action was defended on the ground, that, at the time of effecting his insurance, the deceased was not in a good state of health.

Scott, it seems, was admitted into the "Norwich" after an examination by Dr. Ingleby of Birmingham, in May, 1840. Dr Ingleby, who was considered a severe examiner, pronounced the man to be a sound assurer on life. He, however, was persuaded by some friends to enter another office, and after having paid the "Norwich" five pounds as an indemnification for his release, was admitted in May into the "Imperial," after a rigorous examination by Mr Wickenden, a surgeon of considerable eminence at Birmingham. In the December of 1843, the man died consumptive, his age being 31 years.

The plea set up by the company for refusing payment, was, that the man had spat blood prior and subsequently to his insurance, and therefore, that at the time of effecting it, his lungs were affected with the disease that finally killed him. They called several witnesses in support of this, and strangely enough, most of them were relatives of the deceased. One uncle swore that he never considered his nephew healthy, that he was constantly ailing, that he had generally a cold, and cough with expectoration, and that he frequently expressed a fear of dying consumptive as his father had done. Another uncle deposed to pretty nearly the same things, and added that, when Scott slept at his brother's house, they heard him coughing nearly all night long. The wives of these witnesses made similar statements. The sister of his widow corroborated all that had been said before her, and the widow herself backed them all up, and added further that her husband had never been well during the time he lived at Birmingham. A Mr. Colliss testified to the man's frequent indisposition, to his spitting blood, and his repeated expression of a wish that somebody would make a new pair of lungs for him. Mr. Greatrex, surgeon, said that he had attended him for acute pleurisy, with cough and hæmoptysis; and Mr. Cheetham, a surgeon, said that he attended him in 1836 for cough and spitting of blood, and again, in 1838, for cough and expectoration of mucus streaked with blood.

These evidences were certainly very strong, and might have tended considerably to annul the policy, but that their authorities were not all of them unexceptionable. The widow was proved to be a woman of most dissolute habits, and her sister to be not over mindful of the injunctions of chastity. Mr. Colliss's testimony was so shaken and damaged by cross-examination, as to prove worse than useless; whilst both the surgeons flatly contradicted their own evidence, and at last seemed very undecided as to the quarter in which the truth really lay.

The witnesses for the plaintiffs were, Mr. Williams, a surgeon, who had attended Scott from 1836 to 1842, during which time he never had occasion to treat him for cough or spitting of blood; Mr. Barnett, a clerk in the "Norwich" office; Mr. Edmunds, an agent, and Mr. Williams a referee, of the "Imperial," all of whom spoke in favour of the man's general good health; and Mr. Wickenden, who expressed his belief that, in 1840, when admitted to the insurance, his chest was not unsound.

The jury found a verdict for the plaintiffs.

Had the witnesses for the defendants been more competent to the giving an opinion upon the subject at issue, and had certain of them been of better character, it would have been no very easy matter for the jury to decide which party was in error. The testimony, *pro* and *con*, was as opposing as it well could be, but the least exceptionable evidence seemed to be on the side for which the verdict was given.

The pathological question, however, may be raised, what is the probability of the man's lungs being to some extent unsound at the time of his insurance? Not in the possession of further facts than were elicited at the trial, of course we are not competent to speak beyond the licenses of surmise; and we only entertain the subject at all, because of the important relations which it holds to a delicate and debatable point in practical medicine, and to the system of life insurance generally.

Taking it for granted that the man had been occasionally in the habit of spitting blood prior to his insurance, ought that fact, *per se*, to have disqualified him? Certainly it is a symptom of a very suspicious nature, as the company seemed to believe, for upon it mainly they raised their objection; but it is not *necessarily a serious one*. A man may spit blood copiously and frequently without any disease of his lungs existing. It may trickle from the posterior nares into the throat, and there exciting irritation, cause itself to be coughed up as though the tracheal or bronchial membrane had discharged it. It may be produced from the fauces themselves as a result of local congestion, in which case it is generally attended by a cough, which, to a young practitioner, often gives it a character of consequence. It may proceed from the palate, the lining membrane of the mouth, or the gums, and to an unpractised observer have a seeming of seriousness. Nay, simple turgescence of the blood-vessels supplying the lining membrane of the air-passages or air-cells, may be the origin of a harmless hæmoptysis, with which tuberculisation of the lungs, or even a tubercular diathesis, has no connection whatever. Add to these the frequency with which hemorrhage from the lungs and neighbouring parts is vicarious of sanguineous discharges from remote organs, as in the case of suppressed menses, piles, &c. And we find that a spitting of blood is not usually indicative of pulmonary mischief, unless accompanied by other signs and symptoms which unequivocally mark organic lesion. And though the very existence of hemoptysis would make one particularly cautious in examining a candidate for life assurance, yet *per se* it is no authority for his rejection. We have known men spit blood for years without any attendant organic mischief, and at last be rid of the trouble without any injury following. In cases such as these, the duty of the examiner is to discover the source of the discharge, and to learn whether or not it be connected with local or constitutional disease. This, of course, can only be learnt by a careful analysis of coexistent symptoms, and by the particular means which physical diagnosis places within his reach. Auscultation and percussion should be mainly trusted to in determining whether a subject of hemoptysis have lungs free from cavities, and tubercular or other degenerescence. Without such forms of exploration, skilfully used, we should be inclined to attach little importance to an opinion which pronounced any man's respiratory apparatus to be free from injury.

In the case of Scott, the probability is that, at the time of his admission to insurance, his lungs were not the seat of mischief, because there was a great deal of corroborative testimony to prove such to be the fact; but in our opinion, the evidence of a single individual who had carefully stethoscopised the man, would have weighed more than all the rest put together. Such evidence, if coming from a competent source, could not be appealed against, and its value should make medical examiners particularly careful to trust largely to physical diagnosis in determining the fitness of candidates for life insurance.

Another striking feature in the case in question is, that the man actually did die consumptive, and his lungs were found to be extensively diseased after his death. The evidence here, however, is somewhat vague, and we are left to conjecture, how recent or how remote might have been the occurrence of the disease which proved fatal. One practitioner expressed it, as his opinion, that the ailment was of long standing, and another inclined to the opposite opinion. It is by no means uncommon to find pulmonary phthisis run a very rapid course, especially in individuals who, like Scott, had experienced a reverse of circumstances, and in consequence been sufferers both in body and mind. In such subjects, grief and starvation will generate a tubercular diathesis in a constitution previously free from it, and a few weeks be all the time necessary for engendering the seeds of phthisis, and completing their work of destruction. But in such cases we find in the lungs all the evidences of recent disease. The tubercular matter is usually infiltrated, and accompanied often with signs of inflammatory action or sanguineous congestion. If the tubercles be scattered, they are not strongly adherent to the pulmonary tissue, and are not themselves indurated, or in any degree cretaceous. If there be cavities, they are usually unprotected by membrane, or if lined by one, it is readily detached from the structure it covers, and itself is tender and easily broken down under the fingers. These are the post-mortem appearances which chiefly indicate consumption to have run its course quickly. We could have wished that in the case in question, the specific appearances had been notified, so that we could have confirmed in our own minds the belief we have that the progress of the disease was rapid.

We have dwelt thus upon two particulars connected with this trial, both, because they are interesting as pathological items to the profession generally, and are not unlikely to be of future service in disputed questions concerning life insurance.

At all events, though the issue of the trial was in favour of the medical authorities, it shows how great caution is required in certifying to a man's physical health. It is a duty, in whose discharge the medical referee cannot be too scrupulous, for he may inadvertently, and very unwillingly, become the author of mischief. So numerous are the frauds attempted to be committed against insurance companies, that it is no wonder they should be so active in seizing every opportunity of protecting themselves from imposition. Were they to be indifferent to any deception that might be intended towards them, they would open an avenue for such trickery as would soon operate to their sacrifice.

People who insure their lives, should go upon a broad principle of honour, and with-hold from their medical examiners none of the facts which it be

comes them to detail; and the examiners themselves should take nothing for granted, but trust mainly to the testimony of their own senses, scrupulously exercised. These only are the means by which future difficulties and disputations may be avoided.

EXTENSION OF THE "JOBBING" SYSTEM.

We have recently laid bare the gross case of a "jobbed" examinership—a case which must excite the indignation of every honest man wishing well to science and the due honour of its deserving cultivators. Nor is it our fault if the individual who, giving way to this disgraceful piece of "simony," has now to bear the responsibility of being its principal actor, should fancy that our attack was animated by personal spleen rather than by a thorough disgust at a system which must ultimately bring all the higher representatives of medical science into universal contempt. Mr. Liston thinks himself aggrieved: this is exactly our opinion: but the grievance is not from us. He is paying but the penalty of bad companionship, and its effects bad acts. The source is traceable to those who have made him a truckler for office—a purchaser of scientific distinction on the well known principle by which Giessen diplomas are purchased—a principle which, if extended beyond the circle of the Council, would place the most worthless person in the Profession—aye, or in the kingdom—in the Court of Examiners. As Mr. Liston allowed himself to be *bargained* into place—as he gave up half his fees as the price of securing the other moiety—what security have we that Mr. Liston's clerk—we will go further, Mr. Liston's dissecting potter—may not be smuggled in next on the same pecuniary principle? "Those who win may laugh." Mr. Liston has got the object of his barter—why, therefore, is he angry with us for announcing his mercantile success? Must Mr. Liston's imitative mania, in the eleventh hour of life, not only force him to take a leaf out of Syme's book of Job—the master enacting the same scene of scientific huckstering that he had so stoutly condemned in his apprentice—but also imitate the Edinburgh Professor in his peevish sensitiveness at the exposure of his scientific pliabilities? It is very well among the lower animals for the bear to enjoy the discomfiture of the ape, while the simian beast shall be prohibited the expression of a reciprocal feeling; but among specimens of a somewhat higher civilisation—among professors of surgery—better views of distributive justice ought to prevail. And if Mr. Syme may now justly retort on his old accuser, *à fortiori*, we, who have always condemned scientific jobbing in all persons, may claim a free enunciation of our censures.

The system spreads. We have laid bare the system of domestic economy, including the sale of chairs, which has given such brilliant illustrations to scientific progress in the Academy of James the Sixth, the "far-famed" and highly flourishing University of Edinburgh. Thence we marked its progress, as a filthy bird of Northern origin, to the dark recesses of the Council Chamber in Lincoln's-inn-fields. Another flight—alas! too speedy—brings us to the University College in Gower-street—a job and pension again proclaiming its ominous presence. Professors of physiology seem to be influenced by the proximity of "*jobbing*" professors of surgery. The two scientific importations from Edinburgh—worthy Scotchmen both—stood shoulder to shoulder in collegiate bargainings. As though physiology had taught doubts of the stability of the Gower edifice, a new diplomacy, of immense sagacity, has been displayed by one of its professors, and a provision of a most extraordinary kind secured to him, quite independently of whatever may be the fate of the institution itself.

We can understand that institutions may struggle on, daily losing reputation—failing yearly in funds—as useless to their proprietors as unpopular with the public—and yet hold a place among the scientific bodies of the metropolis; but we will not believe that any institution can survive the pensioning at the expense of the general fund, and independently of all contingencies, of any gentleman, however respectable, merely on the ground that he has influential political supporters. But this is a subject too important to be dispatched in haste. We shall speedily recur to it.

We understand that a fixed annual income of about six hundred pounds, secured independently of all contingencies, has been voted to William Sharpey, M.D., F.R.S., Professor of Physiology, by the ruling committee of University College.

INSURANCE OFFICES AND FEES TO MEDICAL MEN.

We are hearing constantly of the poverty of the Medical Profession. Every day brings before us deplorable facts showing that the *res angusta domi* is urging one unfortunate practitioner after another to biddings after business discreditable to themselves and debasing to the reputation of their order. The evil, thus widely felt, and deeply lamented, is not lessening. It rather increases. The poverty that is declaimed against is the stimulus to its augmentation. There is an "appetite" of poverty, "growing on what it feeds." We throw the fault on society—on the laws—on our own corporations—on Government. Are we right? We may charge on them that they lend us no helping hand; but how consistently do this, when we lend ourselves none? Where is the organisation among ourselves to meet injustice by resistance?—to ward off imposition by combination?—to weaken individual temptation by aggregate support? Why is it that individually we are in isolation and antagonism? Why is it that no man is sustained in making a stand against wrong by the consciousness that every brother member in similar circumstances will do the like? How happens it that an honest man is always feeling that a sacrifice to the honour of his Profession is nine times in ten but a transfer of his practice to some less scrupulous neighbour? The fact is, we do nothing for the interests whose injury we lament. There is no good understanding among us, through our own want of activity and good feeling; and this want of good understanding can lead to nothing but an increase of that trade competition and social misery which threaten the destruction of the gentlemanly standing of our calling.

Does any man fancy for an instant any member of any other profession would submit to the injustice which too many medical men are meekly receiving from insurance companies? Imagine the directors of the Globe, or Atlas, or Hercules, or Achilles societies, asking Mr. A., the attorney, to note precisely, for nothing, the nature of the assets, or Mr. B., the surveyor, to describe minutely, for nothing, the houses of a certain X. Y., who is thinking of a negociation with the company—what would be the response? Not a word is necessary to describe it. Why are we—gentlemen of a learned profession—so much less independent? Why are we—complaining of our poverty—so far more generous?

Mr. Self, of the Commercial-road East, has sent us a correspondence between himself and an insurance company, which throws a very desirable glare of light on this displeasing deformity, and, while recognising the usefulness of the illustration, we are gratified to notice, with our warm admiration, the public spirit displayed in reference to it by our correspondent. Here is his letter to us—

Sir,—Having frequently read your admirable remarks on assurance office fees, I beg to send you a report of a correspondence which has taken place between myself and "The Scottish Widow's Fund Assurance Office," showing the estimation in which the profession are held by these gentlemen.

The following letter is an answer to their thirteen questions:—

Letter No. 1.

Sir,—I acknowledge the receipt of your long list of questions respecting the state of health of Mr. F. La M., and beg to say, as the information I am required to give is to direct you how far it is likely either to be a matter of profit or loss, I am somewhat surprised how you can attempt to gain information so valuable, without the trifling consideration demanded by the profession; and think, if you require any certificate beyond that of your own referee, you have no right to ask it of a stranger, without a fee, as it is solely for the direction of the assurers, and not for the satisfaction of the assured. I, therefore, under such circumstances, must decline answering, unless you comply with my demand of one guinea.

I remain, Sir, your obedient servant,
Wm. Self.

December 6th, 1845.
To Hugh McKean, Esq.

The following is a copy of reply, *verbatim et literatim*:—

Scotch Widow's Fund Assurance Office,
7, Pall-Mall, London, Dec. 6, 1845.

Sir,—In acknowledging the receipt of your note this morning, I beg to correct the strange error you have fallen into, in supposing, for a moment, that the directors of this society are to be guided by your opinion in the matter of *profit or loss*. On reference to the paper in question, you will find, on a more careful examination, that it is at the request of the applicant for assurance, and *not* of the society, that you are called on to answer the queries referred to. The fee demanded by you for answering these queries must, therefore, be a matter of arrangement between you and M. La M.

I am, Sir,
Your obedient servant,
H. McKean.

William Self, Esq.

Letter No. 2.

Sir,—I acknowledge the receipt of yours, of the 6th inst., and beg to assure you that I *have* made a more careful examination of your statements, but am sorry to say I shall ever remain in the dark, unless I am enlightened by you on three points:—First, Why am I asked, unless the directors *are* "to be guided by my opinon in the matter of profit or loss?" Secondly, Why is it you have "fallen into the strange error," to head your medical report, "Questions by the Directors," if they *really are* at the sole desire of the party to be assured? And thirdly, Why is it that you put such a question as the thirteenth, if it is not for the *satisfaction* of the directors? viz., "State any other circumstances within your knowledge, with which you may think the directors ought to be acquainted, to enable them to judge of the *eligibility* of the proposed insurance?"

I am, Sir, yours, &c.,
William Self.

December 8th, 1845.
To Hugh McKean, Esq.

I beg further to say they took the responsibility on themselves (which is as it should be), by accepting a third party, *not* professional. I have pursued this present course ten years, and do not know of any instance where I have failed to satisfy my patient of the unjust attempt to rob us of a portion of our means of living. I cannot but draw your attention to the word "eligibility" in the last paragraph, and too strongly reprehend the course recently pursued by some offices of shifting the questions

off their shoulders, pretending they are at the "request of the applicant." I am very sceptical on some correspondence being so "strictly confidential" as they would lead us to believe, and here forward you the name of a medical friend, whose unfavourable medical report was actually *given* to the applicants (the office I do not now remember). The result, as you may imagine, was his dismissal as medical attendant.

I remain, Sir, yours faithfully,

WILLIAM SELF.

8, Lucas Place West, Commercial Road East.
March 24, 1846.

Mr. Self's conduct deserves to have its best encomium—general imitation. But to secure this object, more than our encouragement is necessary. The voluntary associations should take up the subject. In another article we will show in which way.

THE UNIVERSITY OF EDINBURGH.

In the letters of Mr. J Briggs on the abuses in the above institution, the statement was made that, among other misdeeds committed, Mr. Mackenzie, the anatomical demonstrator, had been unceremoniously expelled from his office. On the 16th February, Mr. Mackenzie forwarded to us for Mr. Briggs a letter demanding proof of the statement or a retractation, Mr. Mackenzie adding, "so far from 'expulsion,' I voluntarily resigned, after twenty-seven years' uninterrupted hard duty. This step I adopted contrary, be it observed, to the earnest wishes of Dr. Monro himself, and entirely in consequence of the state of my health. I suspect, however, that I understand the incidental cause of the misconception into which you have been led; and, if I be correct in my conjecture, then, and in that supposition, permit me to tell you that you have formed a very erroneous opinion of me, if you think so poorly of me as to believe seriously that I would surrender a good situation for anything so contemptible as the mop of a monkey, or the hiss of a serpent. For my part, I have nothing to conceal in this connection, and I am free to make any explanations on any points connected with my resignation." Not knowing the precise address of our correspondent, Mr. Mackenzie's note did not reach him till lately, when accident opened to us a channel for its transmission to its destination. We have received a letter from Mr. Briggs, stating that no offensive idea was intended to be conveyed against Mr Mackenzie, and that the expulsion was cited as an instance of the absurd policy of the notorious town council. It proceeds—

"You must also have remarked that not one allusion was made to the correspondence between the council, Syme, and yourself, nor to the mysterious conference at Sir Jemmy Craig's, &c., on some of which points I might have enlightened the world most marvellously. I am well aware that you were not expelled (nor indeed were Cormack, Bell, Home, &c., from their respective places), and had I the matter to re-write, I should, in compliance with your wishes, show you how clearly I understood the distinction between the two words expulsion and resignation. I am aware, also, that had you not taken Dr Munro under your protecting wing, the university must have closed, unless the professor had retired—an event as unlikely as a fall of the sky I am as intimately acquainted with these matters as I am with the facts and the getting-up of the coalition in October, 1842," &c.

The controversy has extended to so great a length, that we should not have made even this slight reversion to it if there had not been involved a point connected with the personal reputation of a brother anatomist.

THE ASIATIC CHOLERA.

This mysterious scourge is again at its work in Persia, whither it travelled by the route of Khorassan At Herat, Bokhara, Teheren, Ispahan, and Mechid the deaths have been very numerous. At Mechid a third of the population were carried off. The only town of importance that has escaped is Tabres, now one of the principal cities of Persia. This exception is the more remarkable, that Tabres is visited by more caravans than even Ispahan. The various theories that exist on the etiology of cholera, and the unquestionable obscurity that surrounds it, makes it desirable that each movement of the enemy should be carefully noticed by the medical journalist.

TRANSACTIONS OF LEARNED SOCIETIES.

WESTMINSTER MEDICAL SOCIETY.

Meeting of April 4th, 1846.

Mr Hancock, President, in the Chair.

A communication by Mr. Fisher, F.R.C.S., entitled—"A Case of Insanity of Fifteen Years' Standing, with Effusion beneath the Dura Mater, and the Formation of a New Membrane," was read.

W. P., the son of a gentleman of fortune, at the age of eight years, when at Winchester School, received a severe concussion by the blow of a cricket bat or ball, followed by an attack of furious insanity the same evening, from which he recovered for a time, but soon after he was brought to London labouring under a relapse, and then came under my care for the first time. He recovered and went into Devonshire with his friends—had another relapse, and was placed under private medical care for a period of eight years. He was then brought to town, and again became my patient, labouring under the same malady. The history given of him during the eight years was: that he had occasional attacks of insanity, lasting two, three, four, and five months, with a considerable lucid interval between each attack. He was then sent a short distance into the country, under my superintendence, for a period of five or six years, and for the last two years and a half to Messrs. Stilwell's excellent establishment, Moorcroft House, Hillingdon. It was remarked that each attack increased in duration and violence, and there was generally a lapse of eight or twelve months between them. He was a fine handsome, healthy, muscular, young man; to a common observer merely weak in intellect, and childish in manner; loquacious, but without delusion; his appetite voracious; he was fond of reading the lighter works of literature; he played well at chess, billiards, and whist, and was capable of great bodily exertion, frequently walking twenty miles a day when in health.

The premonitory symptoms of each attack were marked by fulness of habit, lowness of spirits, sullen dogged manner, and loss of appetite; he became cruel to animals, of which at other times he was fond; when not insane, his general demeanour was marked by kindness. He had a religious turn of mind; would write sermons, and had a most retentive memory. During his insane attacks he would repeat passages from scripture for many successive hours, and quote poetry. When in health he was amiable and kind-hearted; and he was very susceptible of the tender passion. The last attack of insanity commenced in May, 1845, and continued, with occasional intervals of a few days' tranquillity, until the middle of the succeeding December—a period of seven months—when he rapidly recovered, and from extreme prostration he resumed his usual fulness of habit. On the 3rd of January, 1846, his last illness commenced with a violent pain over the forehead, accompanied by a sense of weight, and lowness and depression of spirits. He was cupped, and took calomel, with aperients. On the 5th, vomiting came on, with increased pain in the head. Mustard poultices and blisters were applied to the stomach, and calomel frequently given, followed by relief from sickness; cold lotions were applied to the head. During this period the mind was perfectly clear. On the 9th he became so drowsy that it was almost impossible to rouse him, and when with difficulty roused, he relapsed immediately into a comatose state. When conscious, he complained of severe pain in the head, and all his symptoms indicated great congestion of the brain, for which active treatment was resorted to. On the 13th, the patient was in every respect worse. The right eye turned outwards, and the eyelid was affected with ptosis, the will having little power over it, and the pupil more dilated than the left, but there was not any paralysis of the muscles of the face. On the 17th the symptoms had all been alleviated by cupping, leeching, and the continued exhibition of calomel, and the patient appeared to be improving. On the 20th the right eye had recovered from its paralytic state, and the pain in the head was much relieved, but the coma continued, and he was with difficulty roused to take food and medicine. On the 23rd the mercury appeared to be affecting the gums; the symptoms were slightly improved; he could get out of bed without assistance, and knew the persons about him. On the 26th he changed for the worse, became feeble and slept constantly. He continued slowly to sink, and died on the 30th, at the age of twenty-three, not having been sensible for the last thirty-six hours.

Post Mortem Examination Twenty four Hours after Death, made by the Messrs. Stilwell and myself.

Upon sawing through the cranium, the instrument perforated the dura mater, and two ounces of blood escaped, which was received in a glass, and upon the removal of the calvarium, the dura mater, the pia mater and the tunica arachnoidea, were found highly injected. The whole of the right hemisphere of the brain had the appearance of a bladder of fluid lying under the dura mater, and from it ten measured ounces of grumous blood, containing a clot and some red blood, escaped. The whole of the brain was then removed and brought to town with the calvarium, and examined without minute dissection, by Dr. Marshall Hall, Dr. Sayer, and myself.

The right hemisphere of the brain was rather less in size than the left, and its surface was of a deeper colour than usual. The arachnoid membrane could be distinctly traced, from convolution to convolution, over the whole surface of the cerebrum. No effusion had taken place in either of the ventricles The left corpus striatum, and the left thalamus, were larger than the corresponding parts on the right side. The medullary and cortical substances of the cerebrum and cerebellum were well defined and perfectly healthy. It was suggested that the dura mater should be minutely examined by Mr. Lane and Dr. Sayer, and it was taken away by the latter gentleman; Mr. Lane being out of town, it was without any dissection examined by Dr. Sayer, and the impression on his mind was, that the sinus longitudinalis was in an abnormal condition; that a gradual separation of the laminæ of the dura mater had taken place to the extent of several inches on the right side of the falx, by which a large pouch had been formed, capable of containing many ounces of venous blood. The membrane was returned the same evening, Feb. 1st, and on the 22nd of March, it was very minutely examined and carefully dissected by Mr. Hancock, in the presence of Mr. Hird, Dr. Sayer, and myself. The true nature of this membranous pouch then became apparent, and I am indebted to Mr. Hancock for the following descriptive details of our investigation.

The preparation showed a large cyst formed evidently of adventitious membrane, situated between the parietal and visceral layers of the arachnoid, and extending the whole length of the right hemisphere of the brain, which had been removed together with the arachnoid and pia mater. This cyst also extended from the falx major laterally, to the portion of dura mater covering the outer border of the cerebrum. It did not communicate either with the superior or inferior longitudinal sinus, the former of which had been laid open to prove this fact; neither did it communicate with the lateral sinuses, but appeared to be the result of abnormal action. The bones of the cranium were much thinner than natural, being at no part more than a quarter of an inch thick, but in places consisting of merely the two tables. There was an evident

bulging of the right parietal bone towards its anterior and inferior angle, and there the diploe had been entirely absorbed by the continued pressure of the cyst within. The right half of the frontal, occipital, and the squamous portion of the temporal bone of the same side had been subject to a similar action. It appeared that the whole brain must have been pushed over to the left side, and that considerable pressure had been exerted on the left parietal bone, which towards its anterior and inferior angle was in places almost deprived of its diploe, although not to the extent of the opposite side, neither did it bulge, as in that situation. The left half of the frontal and occipital bones appeared to have escaped this pressure. When the calvarium was measured internally, there was found an addition of half an inch in favour of the right side. The left portion of the lesser wing of Ingrassius with the corresponding anterior clinoid process was reduced to the thickness of a sheet of writing paper, and presented almost a cutting edge.

Cases of the formation of these cysts or adventitious membranes under the dura mater are not of common occurrence; MM Andral and Foville have noticed them, the latter in the eleventh volume of the *Dictionnaire de Médecine et de Chirurgie*, under the head of "*Meningite*;" and other French pathologists, as one of the forms of "*apoplexie des meninges*" Mr. Prescott Hewett, the curator of St. George's Pathological Museum, brought this subject before the Royal Medical and Chirurgical Society, and published cases illustrative of the disease. He did me the favour to show me four specimens put up by Sir Benjamin Brodie and himself in the museum of St George's Hospital; one of these specimens has been there some twenty years. It has been demonstrated that these membranes are supplied with secreting and absorbent vessels, which in itself accounts for the occasional attacks of insanity in my patient. It was always remarked when he became plethoric, that the attack came on, and upon his losing flesh and becoming very thin, his reason returned

The cause during life was considered hereditary, his father having been insane from injury of the brain, by a fall from his horse, two years before the birth of the son. The result of this investigation cannot be otherwise than satisfactory to the family of the patient, as it tends to do away with any impression as to hereditary predisposition to insanity, and takes us back to the accident received when at school as the exciting cause.

*** The morbid preparation, and the attenuated calvarium were exhibited to the society.

Mr. Stillwell described the state of the patient while at Moorcroft House, and confirmed Mr. Fisher's statement respecting the only attack of insanity to which he was subjected while in that establishment. It continued for seven months, and was marked by the usual symptoms of mania. The treatment which was adopted consisted in the occasional exhibition of calomel, the use of mild aperients, and the strict observance of quiet. Morphia could not be borne by the patient.

Mr. Prescott Hewett observed that he had seen many cases in which there were cysts similar to that then before the society. In general there were not present any diagnostic symptoms by which the real nature of the disease could be ascertained, nor was the presence of such a cyst necessarily accompanied by insanity. The symptoms, on the contrary, might resemble those of apoplexy, cerebral softening, or effusion. These cysts were some years since always described as seated between the dura mater and the parietal layer of the arachnoid, but they have since been shown to occur between the two layers of the last named membrane.

Dr. Sayer read a case from the fourth volume of Andral's *Clinique Médicale*, which he considered bore immediately on the case under the notice of the society, and in which, according to Andral, the effusion was located between the dura mater and arachnoid membranes.

Mr. Hind, Mr. Streeter, and other members of the society made some remarks as to the formation of the cyst, and its general influence on the cerebral functions, after which the further consideration of the case was adjourned till the next meeting of the society.

MICROSCOPICAL SOCIETY OF LONDON.

At the last meeting of this Society a paper from the pen of the Honorary Secretary, John Quekett, Esq., Assistant Conservator of the Hunterian Museum, was read on "The intimate structure of bones in the four great classes of animals, viz., mammals, birds, reptiles, and fishes, with some remarks of the great value of the knowledge of such structure in classifying minute fragments of fossil organic remains."

After alluding to the highly important discoveries made by Professor Owen in determining the affinities of fossil animals by means of the minute structure of their teeth, Mr. Quekett went on to state that in investigating the minute structure of bones he had found that there appeared to be certain characters peculiar to each great class, which could be easily recognised, he had therefore been induced to proceed with his researches in order to verify a mode of determining by microscopic examination the class to which doubtful isolated bones of extinct, or recent animals might belong; [and here it may be observed *en passant* that this acute observer has had an opportunity afforded him, of practically proving the correctness of his theory, by Dr. Falconer the celebrated palæontologist of the Himalaya Mountains, submitting to Mr. Quekett's inspection certain small bones which he had found in the Sivalik Hills, near the remains of the enormous tortoise, twenty feet long, discovered by him, and which were supposed to be the toe-bones of some animal of the same species; but their general appearance not being sufficiently characteristic to enable him to determine this with certainty, he requested the aid of Mr. Quekett without, however, giving him any information for his guidance. This gentleman shortly gave notice that the bones in question, were positively those of a reptile, and most likely of the turtle order, thus confirming the suppositions derived from other evidence of their identity]. In resuming the paper Mr. Quekett described the general structure of bone; after which he proceeded to state, that, upon examining a thin transverse section of bone, with a power of about 200 linear, the Haversian canals are seen to be surrounded with a series of concentric laminæ, together with a concentric arrangement of spider-like looking bodies, which have been termed osseous corpuscles, calcigerous cells, lacunæ, or bone-cells. These bone-cells have little tubes or canals, termed *canaliculi*, proceeding from them, and communicating either with the Haversian canals or with the larger canaliculi of other cells. The average length of these lacunæ, or bone-cells, in the human subject, is the 1-2000th of an inch. They are of an oval shape, and somewhat flattened on their opposite surfaces, and are usually about one-third greater in thickness than in breadth In the bones of birds, the bone-cells are of very small size, and in a transverse section of the Haversian canals may frequently be seen running in a tortuous manner, whereby the concentric arrangement is somewhat altered. In the reptilia, the Haversian canals are few in number, and not so regular as in the two former classes, but the bone cells and their canaliculi, are remarkable for their great length and size. In the bones of fishes, these are certain peculiarities which prevent the possibility of their being mistaken for those of any animal of a higher class. In these the Haversian canals, when present, are of a large size and very numerous, and the bone-cells are, generally speaking, either absent or but few in number, their place being occupied with tubes or canaliculi, which are often of a large size. The bone-cells are of a quadrate figure, and the canaliculi derived from them but few in number, and are readily seen to anastomose freely with the canaliculi given off from neighbouring cells. The bone-cells are very beautifully shown in the thin scales of osseous fishes, in the spines of the *siluridæ*, and in the bony scales composing the external skeleton of the cartilaginous fishes, and in the spines of some of the ray family a peculiar structure may be seen; the Haversian canals in them are large and very numerous, and there are an infinite number of wavy tubes connected with each other in the same manner as the dentinal tubes of the teeth are connected with the pulp.

Mr. Quekett proposes to apply the characters derived from the bone-cells to the determination of the class of animals to which any minute portion of bone may have belonged, for example, the fragment of the bone of an extinct animal. The bone-cells of the mammalia have been stated to be tolerably uniform in size, and, taking these as a standard, it will be found that while the bone-cells in birds fall short of that standard; those of reptiles are very much larger, and those of fishes are so entirely different from the three others, both in size and shape, that they cannot for a moment be confounded with either of them. Thus, then, the distinction between the minute structure of the bones of reptiles and of fishes, and those of the other two classes, is very clearly established, the only difficulty is in determining the difference between that of the bones of mammals and of birds. The chief distinction here is the relative size of the bone-cells, and to this the eye very soon becomes accustomed by practice. A transverse section of the bones is also to be preferred for comparison, as the length of the bone-cells is always greatest in that direction.

The author then stated that anatomists have long been familiar with the fact, that in proportion to the size of the blood corpuscles, so is that of the capillaries, and of the muscular and nervous fibres; and it would appear that the same thing held good with respect to the bone cells. From the highly valuable table of the blood discs, lately published by Mr. Gulliver, it appears that the blood particles are largest in reptiles, smallest in mammalia and birds, and in fishes of an intermediate size; and it has already been stated, that the bone cells are largest in reptiles, and are much smaller in mammalia and birds; hence it would appear, that the bone cells are subject to the same law as the capillary, muscular, and other systems; and in the advanced stages of the inquiry, it may possibly turn out that if one or other of these systems be known, that the size of the others may be readily inferred.

Mr. Quekett concluded his highly interesting and most important paper, by remarking, that however different the size of animals of any one class may be, precisely the same structure of the bone is found. Thus there is no perceptible difference in the intimate structure of the bones of the enormous iguanodon, (100 feet in length) and in those of the smallest lizard, or between that of the bones of the mastodon, as compared with the structure of those of the mouse, and hence arises the value of these microscopic characters, in determining the class to which the animal (whether recent or fossil), whose bone may be examined, has belonged.

MISCELLANEOUS CORRESPONDENCE.

NON-PAYMENT OF MEDICAL WITNESSES.

(To the Editor of the Medical Times.)

SIR,—I beg to present you with the accompanying statement, not for the sake of trifling with your attention on an individual hardship, but in the belief that you will consider it important from the relation which the subject thereof bears to the interests of the profession, and consequently be induced to publish it, or do that which would be infinitely more efficient—notice the subject yourself.

Very obediently yours,
P. HALFORD.

1, City-road, Finsbury-square.

About nine or ten weeks ago a man was brought to me in a state of unconsciousness, with an extensive contused wound on the right side of the head, and with great redness and swelling under the opposite ear. The redness and swelling were produced by a blow, which knocked the man down, threw his head in contact with the curb-stone, and thereby produced the wound—probably, also, the concussion. These injuries having been occasioned wilfully and unjustifiably, the case was brought before the police magistrate, who, desirous of being satisfied touching the man's ultimate recovery, and the probable duration of his illness, before finally adjudicating on the matter, had occasion to remand the case several times. On two of these occasions (having been informed by the police that a certifi-

cate would not be sufficient) I waited in the police-court from mid-day till evening to give evidence, and from ten until four on a subsequent day, to repeat the evidence previously given. Here, the magistrate considering his power too limited to enable him to punish the prisoner adequately, sent the case to the sessions, where his worship also bound me to appear under a penalty of £20. Of course I attended and was compelled to wait—on the first day from ten until six; on the second day from ten until five, before the grand jury found a true bill; and on the third day from ten until four, when the prisoner was convicted. I now come to that point of the subject which relates to the compensation of medical witnesses, and this, I conceive, affords a curious illustration of the inconsistency of the law on the matter. The trial being over, I applied for expenses for loss of time, &c., but as I had been previously informed that the adoption of a mere technicality would prevent their being allowed, I did so—more, perhaps, as a matter of principle than for the sake of the money. I applied personally to the police magistrate at the police-court and to the judge at the session, when they replied that the law left them without control, or the expenses should have been most readily allowed in such a case. Now, it seems that the title to compensation hinged upon a reply to a question which, without any great impropriety, might have been answered either one way or the other—viz., "was it the blow which the prisoner first struck that produced the mischief?"—or "was it the 'fall' which the blow produced that did it?" Now, although the reply was that I believed the fall to have been the most immediate cause, yet an adverse witness might, and, perhaps, conscientiously, have deposed that the swelling and redness occasioned by the first blow must have required so much violence for their production, that the concussion had, in his belief, resulted immediately from this blow. And when it is considered that did the evidence of the witness go to prove the first blow to have directly produced the mischief, the case would constitute one of felony, in which the expenses would be allowed—whereas, did it only go to show that the fall consequent on the blow produced it, the case would constitute one of assault only—in which the expenses would not be allowed—I think it must be admitted, Mr. Editor, that the law is somewhat too complimentary to the conscience of a witness in assuming that the premium it offers to seduce it will never be accepted on the terms. So much, Mr. Editor, for the law of the matter, which, so far as the propriety of the distinction it makes between felony and assault for the purpose of measuring guilt goes, it would be presumptuous in me to question. But, that such distinction should be equally wise, just, or politic as a test of the value of a witness's services or time, by no means necessarily follows. In short, if that portion of the subject which relates to the compensation of medical witnesses be correctly stated, not only myself, Mr. Editor, but, I believe, most surgeons, would feel obliged by your sentiments on, and exposition of, a law which, after extorting six days of a man's time from him, professes to manifest its justice by awarding him full compensation if the case be proved one of felony, and refusing the least compensation if proved one of assault only; and this, too, in cases where (as far as relates to a just title to compensation) this palpable distinction is founded on the perfection of an equivocable difference. The only questions that the subject admits of appears to be—"Is the law just in denying compensation to a witness in the one case—is it extravagant and capricious in granting them in the other—or does it regard it to be more expedient, more conducive to the safety and welfare of the public, to proffer compensation for the exaggeration of crime?"

*** The abuse here properly stigmatised deserves, and shall receive, further notice.—Ed.

The first meeting of the Western Medical and Surgical Society was held at the Western Grammar School, Alexander square, Brompton, on Wednesday evening last, when the chair was filled by the president Sir James Clark, Bart. A large number of the most influential practitioners in the neighbourhood attended.

GOSSIP OF THE WEEK.

Obituary.—Died at Yeovil on the 22nd of March, in the 71st year of his age, Maitres Lambe, Esq., surgeon. On the 1st inst, aged 39, George Bernard Corfe, Esq., surgeon, and coroner for the borough of Southampton. March 30th, at the Royal Barracks, Carlow, John Maharg, surgeon, Esq, 70th regiment, in the 43d year of his age.

Naval Medical Association.—A meeting was held on the 18th of December, 1845, at the Royal Naval Hospital, Bermuda, Dr. Evans, *Deputy Medical Inspector*, in the Chair to promote the formation of a medical association, embracing in its constitution all the Naval Medical Officers. The medical officers of the West India squadron have shewn a laudable zeal for the advancement of their branch of the profession; and if we consider the many opportunities afforded to naval medical men for acquiring information, there cannot be a doubt, if the praise-worthy object be carried out, that many of the service will discover a new field for exertion that cannot fail to result in their own improvement and the benefit of science.

Lunatic Asylum for Manchester.—In consequence of the necessary enlargement of the Manchester Royal Infirmary now in progress, it has been suggested and very properly, that the wards hitherto occupied by lunatics shall be given up to the general purposes of the infirmary, it being most desirable that this hospital should be as complete as possible for the rapidly increasing population of this large manufacturing town. The lunatics have therefore been removed into private asylums during the erection of a commodious hospital for their reception, the building of which will immediately be proceeded with on a plot of ground of about thirty-seven acres, in Stockport Etchells, near the Cheadle station on the Manchester and Birmingham railway, which has just been purchased at the cost of £3,500.

Royal College of Surgeons of England.—At the examination on Tuesday and Thursday last for the fellowship of this college, only six candidates presented themselves.

Newcastle Infirmary.—An appeal is about being made on behalf of this excellent institution (established nearly a century ago), in consequence of the utter inadequacy of the accommodation at present afforded by the infirmary for the rapidly increasing necessities of the town, it is proposed to increase the size of it, no addition having been made to it since 1830, when a third story was added for syphilitic patients, and the number of beds amounted to one hundred and fifty; since then no increase in its accommodation has taken place, notwithstanding the enormous increase in the population, the consequence is that patients are frequently sent away for want of room.

Mr Herapath, the celebrated analytical chemist of Bristol, met with a serious accident last week. While operating upon some fulminating silver, it suddenly exploded, and burned his face so seriously that for a time it was feared he would be deprived of the sight of the left eye at least. He is progressing favourably.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity.—A half-yearly General Court of this Society was held on Wednesday the 1st inst., at the Gray's Inn Coffee House, Holborn, Martin Ware Esq. V. P. in the chair. On reading the minutes it appeared that two very gratifying benefactions had lately been received. One of these was a legacy, announced by T. A. Stone Esq, of fifty pounds bequeathed by the widow of the late Matthew Baillie Esq., formerly President of the Society, through the liberality of William Hunter Baillie Esq, son and sole executor of the testatrix, this sum had been received free of legacy duty. The other was a donation, presented through Sir B. C. Brodie, Bart, of fifty guineas from Lord Denman. His lordship it will be remembered is the son of the late Thomas Denman M.D., who was one of the original founders of this Society. On the recommendation of the court of directors it was unanimously resolved, that William Hunter Baillie Esq., be elected an honorary member, and that Lord Denman be invited to become a vice-patron of the society. The annual dinner is to take place next Saturday the 18th inst., at the Freemasons' Tavern, and the Chairman of the Steward's Committee, Mr. Propert, drew attention to the importance of *notice being given* by those who intend to be present. The arrangements have been made in the best possible manner, and a full attendance of the members and their friends is expected.

Mr. Liston's paper, containing the details of the late Mr. Seton's case, will be read at the next meeting of the Royal Medical and Chirurgical Society, on the 14th instant.

Curiosities of Medical Literature.—Dieffenbach, of Berlin, entitles the plastic operation for the cure of lachrymal fistula by the unnaturally elongated cognomen—Dacryocystosyringokatakleisis. The mere attempt to utter such a lengthy combination of harsh sounds is enough to dislocate the jaw.

Promotions.—Assistant-Surgeons—S. Livesay, M.D, J. Belcher, M.D., E. Groves, J. W. Roberts, J. Clarke, W. L. Methven, C. T. S Kevern, T. J. Graham, J Campbell, M.D, H. Trevan, M.D., G. Whitmarsh, A. Slight, R. Gregor, and W. Bateman, to the rank of surgeon.

Appointments.—Asst.-Surgeon J. C. Austin, to the Caledonia.

On Monday, Dr. Davies was unanimously elected one of the Physicians to the Bath United Hospital, in the room of Dr. Barman, resigned.

Queen's College, Birmingham.—The Reverend and Worshipful Chancellor Law, the Vice-President, has taken up his residence in the College, in order personally to superintend the proposed extended system of Collegiate Medical and Surgical Education. The Reverend Gentleman has offered to the resident students the following munificent prizes, viz.—£50 to the student who may carry off four medals; £30, three medals, £7, two medals; £5, one medal. William Sands Cox, Esq, has also gone into residence in order to assist the council in carrying out the important arrangements.

War-Office, April 3rd—16th Light Dragoons Williamson Evans, M D, to be assistant-surgeon, vice Stephens, appointed to the 10th Light Dragoons. 24th Foot Surgeon George Kincaid Pitcairn, M.D., from the 19th Foot, to be surgeon, vice Lorimer, who exchanges. 19th Foot Surgeon William Lorimer, from the 24th Foot, to be surgeon, vice Pitcairn, who exchanges. 84th Foot Surgeon John Marshall, from the 65th Foot, to be surgeon, vice Daniel Armstrong, who retires upon half-pay. Assist.-Surgeon John Edward Stephens, M.D., from 16th Light Dragoons, to be Assistant-Surgeon.

MORTALITY TABLE,

For the week ending April 4, 1846

Causes of Death.	Total.	Average of 5 summers	Average of 5 years
All Causes . . .	1028	1080	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	169	183	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	109	115	101
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	182	169	157
Diseases of the Lungs, and of the other Organs of Respiration	316	363	294
Diseases of the Heart and Blood-vessels . . .	30	30	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	90	69	72
Diseases of the Kidneys, &c.	13	7	7
Childbirth, Diseases of the Uterus, &c.	11	12	10
Rheumatism, Diseases of the Bones, Joints, &c . .	13	7	7
Diseases of the Skin, Cellular Tissues, &c.	4	2	2
Old Age	12	90	67
Violence, Privation, Cold, and Intemperance . .	44	27	26

THE MEDICAL TIMES.

No. 312. **SUMMARY.** April 18.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

(From our own Correspondent.)

ACADEMY OF SCIENCES.

Meeting of the 6th April, 1846: M. Mathieu in the Chair.

Intermittent Fever: by Dr Durand (of Lunel).—The noxious influence of marshes may be referred to a threefold cause—putrid emanations, damp, and heat. The depressive action of the two last-named agents requires no demonstration; it is admitted by all that putrid animal matter evolves ammonia; vegetable matter, in a state of decomposition, yields, on the contrary, alkaline products. In marshes, we find both animal and vegetable substances in a state of putridity, and the recent dew collected over bogs is found to be acid (Moreau, 1828); when preserved some time, on the contrary, it is alkaline (Vauquelin: Analysis of the Dew of the Pontine Marshes). The marsh miasma acts, therefore, in the first place, as a direct sedative of the circulation, in virtue of its alkaline properties, and, at a later period, by the disengagement of negative electricity, when acid products are evolved, tends still further to diminish the natural excitement of the blood—an electro-positive fluid, according to Bellinger and Matteucci.

Valvular Patency of the Orifices of the Heart, by Dr. Parchappe.—Dr. Parchappe communicated to the Academy a very long memoir, the substance of which may be given in a very few words. 1. Dr. Parchappe does not believe that the order of the contractions of the heart is ever interverted, so long as the blood continues to circulate through its cavities. Even after the heart has been separated from the body, the contraction continues for a certain time to be propagated with regularity, from the auricles to the ventricles. 2. Valvular insufficiency is not by any means so common as it is generally supposed, and the method usually employed, in order to ascertain if the aortic valves, for instance, are sufficiently flexible to close the orifice of the artery, namely, pouring water down the aorta, is not, in any case, satisfactory, on account of the difference of weight between blood and water.

Atomic Weight of Uranium; by M. Peligot.—M. Peligot had assigned 750 as the representation of the atomic weight of uranium. Professor Berzelius had fixed upon 800. M. Peligot forwards, on the same subject, a long memoir, in which his own results are confirmed. The oxalate of uranium obtained by several methods, and purified by repeated crystallisation, has given results varying between 745 and 753. Seven analyses of the acetate have given, as a mean term, 750. This number is the exact produce by 60 of the representative of the atomic weight of hydrogen—a circumstance which illustrates once more the great law laid down by Dr. Prout.

ACADEMY OF MEDICINE.

Meeting of the 7th April, 1846, Dr. Roche in the Chair.

The Plague.—On being asked when the practical conclusions of the report on the plague may be expected to be communicated to the Academy, M. Prus stated that they had not yet been unanimously agreed to in the commission, but that very little further delay would take place.

An Essay on the History of Medicine and Surgery, in Greece, before Hippocrates, by Dr. Malgaigne.

Many questions relative to the state of medical science previously to the birth of Hippocrates have been hitherto unanswered, or have been answered in a manner but ill agreeing with historical truth. As a striking illustration of this assertion, M. Malgaigne instances the generally received opinion that medicine and surgery were first cultivated in the temples, and by the priests of Esculapius. This opinion, comparatively of recent origin, had not yet been spread in the days of Galen, who professed that the practice of medicine was at first confined to one family—the descendants, not the priests, of Esculapius. Reference to ancient historical documents shows that Galen, though less far from the truth than modern historians, still laboured under a strange mistake, and that surgery or medicine were at no time the heirloom of one caste or of one family. Before entering upon his subject, Dr Malgaigne thinks it necessary to state how he has been led to conclusions differing from those generally adopted on this subject. A correct picture of any epoch cannot properly be drawn from the testimony of succeeding ages, and the safest road to the truth lies in the evidence of cotemporaries, or, at the farthest, of the succeeding generation, who may naturally be supposed to possess accurate information of events still recent. For the portraiture of the heroic, and what may be justly called the *middle ages* of Greece, one author (Homer) alone must be consulted, and his isolated situation gives his narratives additional interest and importance. Herodotus, who read his history at the Olympian games, in the year 456, B.C. (four years after the birth of Hippocrates), furnishes the most valuable documents for the history of the century which preceded that of the Oracle of Cos, and, in proportion as we draw nearer to Hippocrates, fresh authorities crowd in—Thucydides, Xenophon, Aristophanes, Plato, Ctesias, and Hippocrates himself, whose cotemporaries they were. Any attempt to separate the origins of medicine and surgery has hitherto proved abortive. The succession of events being impartially examined on this point, it becomes evident that the first physician, prevented by religious prejudice from attending to medical therapeutics, practised surgery exclusively, and formed a numerous class of practitioners, on whom the care of internal diseases naturally devolved when the interdiction was raised; and as, in reality, the two professions were never distinct from each other in Greece, it is easy to understand how, in this paper, more specially consecrated to the history of surgery, the author has found himself under the necessity of adverting also to the progress of medicine. In Dr Malgaigne's former researches, it has already been shown that, in the time of Homer, there was not, nor could there be, any internal pathology. Wounds alone were attended to, and the ιατρος of that day doubtless corresponded to the surgeon of ours. It is also worthy of notice that the healing art, limited as it was, was then studied and practised only in Greece and Egypt. In the Odyssey (lib. iv, 232) the Egyptian physicians are mentioned as surpassing all others in skill. They were also numerous in Greece, but, strange to say, no trace of surgeons can be found in the Trojan host, nor amongst the allied nations. Arrows and splinters of lances were extracted by the companions of the wounded Trojans, and cures were looked upon as the result of the interference of the gods. So late as in the days of Herodotus, the kings of Persia, those powerful monarchs of the East, were obliged to borrow their physicians from Egypt or Greece, and Hippocrates himself asserted that the barbarians had not then any physicians. Surgery may, therefore, be traced in Greece to a remote origin, and it is not uninteresting to find the study of medicinal plants in female hands. Nestor recals, as a recollection of his earliest youth (Odyssey, lib. xix, 455), the fair Agamede, "who knew as many remedies as are produced on the entire surface of the earth." This is a first feature of resemblance with our middle ages, when the wounded knight was nursed by the castellan's lady. On the field of battle we find, in our old records of chivalry, that enchanters supply the place of surgeons. Guido de Cauliaco reports that in his day, the men-at-arms, Teutonic knights, and other followers of war, dressed all wounds with conjurations and draughts. These conjurations we find in high repute during the youth of Ulysses. That prince's thigh was severely injured by the tusk of a boar, and the sons of Autolycus, his uncle, skilfully bandaged the limb, and arrested the hemorrhage by incantations (Iliad, lib. iv, v, 190). Such was the origin of the scar by which he was afterwards identified. The first surgeon mentioned by Homer was Chiron, whose pupil, Esculapius, is nowhere in Homer referred to as a god. From Chiron, Achilles received instruction in the healing art, and imparted it to Patroclus. Esculapius educated his two sons, Machaon and Podalyrus; but, besides the school formed by Chiron, many other surgeons flourished amongst the Greeks. Evidence of the assertion may be found in several passages of Homer, but Machaon appears to have enjoyed the greatest reputation for skill. Thus, he is sent for by Menelaus, and dresses that prince's wounds on the field of battle.—(Iliad, lib. v, v. 900.)

If we inquire into the resources of this very primitive military surgery, we find simple wounds dressed with emollient applications. The suspicious looking wound was sucked before it was dressed. Foreign bodies were removed with the sharp instruments (Μαχαιρα). Hemorrhage was arrested by the application of a bitter (doubtless, an astringent) root, bruised between the hands. This was only local treatment. In another passage Homer mentions the regimen. Machaon himself was struck by an arrow. Nestor led him into his tent, where he made him drink a cup of wine, containing scraped goat's cheese and flour.—(Iliad, lib. xi, v. 620.) The recipe may certainly surprise us, and several critics condemn, in such cases, the exhibition of wine; but we must recollect the wound was very recent, and when Larrey exhibited wine to the wounded under his care, and even to those whose limbs he had just amputated, he was, probably without being aware of the circumstance, a disciple of the school of Machaon.

No doubt it is impossible to assert that things occurred at the siege of Troy exactly as they are narrated by Homer, but it is perfectly certain that customs, habits, and everything connected with the exercise of various professions, were described by the poet with the most faithful accuracy. Homer flourished two or three centuries after the siege of Troy, and we may therefore conclude, with a tolerable degree of certainty, that in the ninth century A. C., four hundred years only before Hippocrates, surgeons existed in Greece, but no physician for the internal complaints; that medical art was created by Esculapius, in whose family it did not remain as an exclusive heirloom; and lastly, that the science was not cultivated in his temples, for the simple reason that he was not deified for a long time after that period. Plato, according to Socrates, states that Pindar and the tragic writers are those who made Esculapius son of Apollo, and who asserted he was struck with a thunderbolt for having cured a mortal disease. Socrates carefully adds, he does not believe one word of the story.

The first notions of internal medicine may be conjectured to have been established a short time before the erection of the temples of Esculapius, perhaps two or three centuries before the birth of Hippocrates. Herodotus has left a long account of the adventures of a surgeon, named Democedes, and it contains some points of analogy with the lives of several of our modern surgeons. Democedes was born at Crotona, and settled at Ægina, where he very soon threw the other practitioners in the shade. The following year the Æginetans, anxious to preserve amongst them so learned a physician, gave him out of the public treasury a pension of one talent (£216). The ensuing year the Athenians outbid them, and obtained the doctor's services at a salary of one hundred mines (£360). His renown increasing with his years, Polycrates, tyrant of Samos, attached him to his person, and gave him two talents (£430) a-year. But Polycrates was killed treacherously by Oretes, and all his slaves Democedes amongst them, were transported to Asia. A succession of events useless to record brought him to Susa, where fortune awaited him. Darius in leaping from his horse, gave himself a sever sprain; indeed, as far as we can judge from the text of Herodotus, the inferior extremity of the fibula was fractured. He had at his court the most celebrated physicians from Egypt; but these persons were very clumsy surgeons, and they gave the prince so much pain by the violent manner in which they handled the injured foot, that a violent irritation supervened. The king did not close his eyes for seven days and seven nights. On the eighth day some courtier mentioned the Grecian slave taken with the property of Polycrates. Democedes was accordingly sent for, and in such despatch that he appeared in rags, and with shackles to his feet. Being asked if he knew anything about medicine, he hesitated before he answered in the affirmative. In a precisely similar situation, Ambrose Paré also hesitated to acknowledge his profession. But in antiquity, as well as in the 16th century, princes were in possession of never-failing methods of loosening a surgeon's tongue. Darius sent for instruments of torture, and Democedes immediately complied with his wishes; but, in order to shelter his responsibility, he declared that his knowledge of medicine was extremely limited. He treated his royal patient according to the principles of Chiron, with emollient applications. Sleep returned, the king soon recovered, and his gratitude knew no bounds; but the Egyptian doctors were condemned to be crucified—a punishment which was remitted through the intercession of their successful rival, who was richly recompensed. But he was haunted with the desire of returning to his native country, and having cured Atossa, wife of Darius, of an ulcer of the breast, he obtained from her that she would express a wish to possess Grecian slaves—a desire which Darius endeavoured to gratify by invading Greece. Democedes accompanied the invading army, escaped, and was subsequently married to a daughter of Milo, of Crotona. Thus, the first cause of the invasion of Greece by the Persians was the captivity of a Greek surgeon.

Another Grecian colony soon rivalled Crotona in the excellence of its physicians. It was Cyrena. As to Cos and Cnidus, they were not even mentioned. We must even reluctantly confess that the first appearance of the disciples of the school of Cos on the stage of public life, does not say much in favour of their moral character. Some years before the birth of Hippocrates, a physician from Cos, called Apollonides, went to Persia to seek his fortune, and cured of a severe wound Megabysus, son-in-law of Xerxes. Megabysus having died a short time after, Apollonides continued to attend professionally his widow, Amytis, and being sent for one day to give her his advice for some trifling illness, he had the audacity to inform her that she was labouring under uterine disease, and that her only chance of a cure was in intercourse with one of the other sex. Amytis received the advice with becoming submission, and permitted the doctor to perform his own prescription. Apollonides was soon tired of his conquest, and, having forsaken her, awoke in her breast a violent resentment. She confided the entire transaction to her mother, and obtained revenge. Apollonides was arrested, submitted to atrocious tortures, and buried alive on the day of the death of his implacable enemy. This tragical history is narrated by Ctesias, who afterwards became physician to Artaxerxes. Galen asserts this Ctesias was of the family of Esculapius, and consequently a relative of Hippocrates; but of this assertion no proof whatever has been given; at any rate, Apollonides was never stated to have been an Asclepiad, and therefore the two first Greek physicians mentioned in history, Democedes and Apollonides, did not belong to the sacred family. To these may be added Alcmeon, of Crotona; Acron, of Agrigentum; Herodicus, of Leontium, and Eutyphon, of Cnidus, to whom were attributed the Cnidian Sentences, and who is by no author considered to have been even distantly related to the descendants of Esculapius. Besides these numerous physicians, antiquity could also boast of many quacks, soothsayers, and priests of Esculapius—dangerous rivals in practice, but never in scientific matters.

Let us now examine how medical studies were instituted; what resources were offered to the pupils; what was the nature of their intercourse with each other and with their patients in private practice; and lastly, what was the constitution of military surgery.

There were no medical schools, properly so called. Galen speaks, it is true, of the three great schools of Cos, Cnidus, and Rhodes (which was probably mentioned by mistake for Cyrene); but by the word school Galen meant only an association of physicians, practising under the influence of the same doctrines, and even such schools it would be difficult to demonstrate the existence of previously to Hippocrates. It is sufficient to glance at the Hippocratic collection to form an idea of the incredible number of diverging theories which divided the profession. The pupil desirous of beginning the study of medicine, made choice of a master, to whom he paid beforehand the sum stipulated for his apprenticeship. A passage of Meno is perfectly clear on this point. Another passage of Protogoras shows that Hippocrates was one of those teachers who took pupils for a pecuniary consideration. A proof, this statement may also be found in the celebrated oath, where it is also said that, if the pupil had no money, he was made to sign a written obligation for the amount. It is right not to forget the honourable exception which Hippocrates himself established to this rule. What was the amount of the *fee* to the master? It seems to have depended very much upon his reputation. Evinus, of Paros, received only five mines (£18), and Zeno one hundred (£360). The books were already numerous; it is an undoubted fact that many works of the Hippocratic collection were written before Hippocrates. Oral lectures seem to have been the most common mode in which instruction was communicated.

HOPITAL NECKER.

Clinical Lecture. *Diseases of Nurses and Infants;* By Professor Trousseau.

Sclerema.—The first case to which we will direct your attention, is that of an infant, aged twenty-five days, and affected with induration of the cellular tissue. The mother is dying of what may be called a sort of puerperal farcy; when she came to the hospital, abscesses were forming in the limbs, and a collection of pus had accumulated in the left knee, with considerable pain and febrile excitement. She was improved so much during the few days which followed her admission, by the exhibition of one-twelfth of a grain of calomel every hour, that we thought her saved. Salivation was established at the expiration of the second day, all the morbid symptoms had yielded, and fluctuation could no longer be felt in the diseased joint. Since then a poultice, with leaves of datura stramonium, opium, and camphor, has been applied to the knee, but a sudden relapse has taken place, and her present state leaves us but little hope of saving her life. For several days her infant took the empty breast; the want of proper food, and perhaps his unsuccessful efforts to draw from his mother a sustenance which she could not yield, disordered the gastric functions, caused diarrhœa and vomiting, which milk and magnesia have to a certain extent allayed, but yet the weakness of the child continued, he grew gradually colder, and on touching his body this morning (April 6th), we find the legs and thighs in a marked state of induration. The child's cry is still vigorous, but a fine crepitus may be heard in the lungs. This will be a fatal case; true sclerema is not cured, and death is generally the result of the extension to the external viscera of that rigidity which you notice in the external organs. In many cases of this malady, the incapacity of the lung to perform its functions is obvious, for the infant's head hangs over his chest, and a bloody saliva runs from his mouth. Most cases of sclerema, I might say all, are fatal; a difference of opinion on this point can only arise from errors of diagnosis, which may be accounted for in the following manner.—It is common to find children three or four months old, after diarrhœa or erysipelas, affected with limited œdema and hardness, which may be dispelled, but when, during the first month of life, without any functional lesion of the skin or any internal phlegmasia to explain the induration, a child becomes hard, he will surely die. M. Charcellay compares sclerema to the anasarca which sometimes follows scarlatina. He states that in both the urine is albuminous, and that both have their origin in a morbid condition of the kidneys. It is difficult to obtain the urine of so young an infant, but the research is an interesting one, and we will endeavour to ascertain its truth.

Tubercular Disease in Children.—Dr. Louis has stated that in childhood tubercles became frequent only between the ages of two and eight, and diminish in frequency from that period to puberty. This assertion could only have been made at a time when no special hospital existed for the treatment of diseases of new-born infants. During seven years, says Professor Trousseau, I have been attached to the care of infants at Necker's Hospital, and I distinctly assert that under two years, more infants die of tubercular consumption than of all the other causes of dissolution put together. It is a circumstance which must not be forgotten, that infants may be affected with tubercular disease, and yet present none of those external appearances which we generally refer to the diathesis. As an illustration of this statement, we may bring forward the case of the infant who died of meningitis yesterday. He was aged seven months, and was a remarkably fat, healthy, and lively-looking child. Both the parents were in the enjoyment of robust health; the child was suddenly seized with meningitis, and the malady remarkable besides by the manifestation of the characteristic red stain of the skin, the alternations of improvement which it presented, and the *removable* paralysis by which it was accompanied, was fatal in the space of five days. And I now present to you the lungs, spleen, liver, and intestines, studded with myriads of tubercles. On the surface of the cerebral envelopes, also, you may perceive numerous granulations strewed like a fine sand. It is not impossible that meningitis was in this case determined by the presence of these granulations; but I call upon you to remark that these granulations all occupy the convex surface of the cerebrum, and the anatomical changes resulting from the meningitis, are all, on the contrary, on the inferior aspect of the brain—a fact to be explained by the remark that whatever may have been

the determining cause of meningitis, it always presents the same symptoms, progress, and anatomical changes. The chief conclusion I wish to draw from this case is, to caution you, when you meet with meningitis in very young children although they may present none of the appearances of consumption, not to hasten to assert that the cerebral disorders have not originated in the deposition of tubercular matter. In a recent memoir, M. Rilliet states that meningitis often presents in children premonitory signs of very long duration occurring three and even four months before the outbreak of the malady. These prodromic symptoms would be crossness, somnolency, feverishness, and various functional signs of cerebral suffering. In our opinion, M. Rilliet's observations have borne too exclusively on cases of *tubercular* meningitis. Now, it is well-known that most of these are at the same time accompanied by visceral tuberculisation, and I am inclined to think that the crossness, erratic fever, &c., looked upon by M. Rilliet, as prognosticating meningitis, are only the symptomatic expression of a tubercular diathesis. Besides, in some cases of inflammation of the brain induced by the presence of tubercular granulations, we find sometimes only three or four granulations, forming so very small an organic lesion, that we cannot reasonably grant them the power of producing premonitory symptoms of any kind.

Rheumatic Paralysis of Nurses.—The disease I am about to describe is one which had never attracted my notice before 1841, and which I have never met with but in nurses. Do not attach any importance to the name I have given to it; I have used the designation only for want of a better. You may observe it in a woman at present lying in the wards. She was confined eight months ago, and continued in perfect health, nursing her child, for the next six months, when she was suddenly affected with the disease which has brought her to the hospital. Very often during the day, the patient is seized in one of her limbs with a sensation of numbness and formication, followed by spasmodic contraction and loss of power of the extremity; the symptoms last a few minutes, and reappear soon after in another limb, or in the tongue, throat, or eyes; in the latter case vision becomes indistinct, a ligature applied round a limb at once produces the spasmodic contractions. These are more frequent and severe in bed, and in the sitting posture. The patient's general health is good, but the frequent repetition of the symptoms has weakened her. The first time I met with this disease I was very much embarrassed. The patient had formerly suffered from rheumatism, and I fancied that her present symptoms might perhaps be attributed to the same unknown rheumatic element, so prone to migration I bled her, and she was cured. Since that time I have met with the same symptoms in eight or nine nurses, and in none had rheumatism preceded them, so that I still remain very much in the dark as to the intimate nature of the disease. However venesection proves in all cases sufficient to achieve a cure. The nurse at present in the wards had not passed, for the last two months, a single day without numerous attacks. We bled her yesterday morning, and none have occurred since. The blood is very fibrinous. At any rate, should you meet with similar case, Gentlemen, do not become alarmed about the state of the spinal chord, be convinced that the most serious (apparently) functional disorder of the nervous system may exist without any anatomical alteration of the nervous centres. I need only advert to nervous asthma, which is so frightful to behold, and yields so readily to the inhalation of stramonium, and to fits of hysteria, to impress strongly this point on your memory.

DAN. M'CARTHY, D.M.P.

Italy.

SUDDEN DEATH FROM SPONTANEOUS RUPTURE OF THE STOMACH.—Signor Morici, in the *Annali Universali di Medicina*, relates the case of a man, thirty years of age, who, after having suffered from intermittent fevers on several occasions, again experienced an attack, which was apparently cured in ten days. Five days afterwards he was suddenly seized with violent pain in the lumbar region. There was, however, no fever, no swelling, redness nor abnormal heat, nor hardness at the seat of the pain. The pain was aggravated on pressure, and the patient continually sat erect in bed, as it was impossible for him to lie on his back or side. Next day feverish symptoms made their appearance, accompanied with retraction of the right testicle, difficulty of making water, and a sensation of constriction in the sphincter of the anus. By the third day the fever had abated, and he was even able to take a little soup. In the evening he rose to go to the water closet, and in returning to his bed fell down dead. The thoracic viscera were found healthy, as were also the abdominal, with the exception of the stomach, which was ruptured on its anterior surface, almost in its very centre. The aperture was about three fingers' breadth in length, and had allowed the contents to escape among the abdominal viscera. Although the margins of the aperture preserved their natural texture, they were slightly hypertrophied and dotted with redness. The same dotted redness was remarked on the mucous membrane of the stomach a short distance around the rupture, but the membrane retained its natural texture, and had undergone no pathological changes. Signor Morici could not account for the production of the rupture, unless it were the straining at stool acting on a part of the stomach, weakened by circumscribed inflammatory action of the mucous membrane, as indicated after death by the dotted redness In this, as in all other recorded cases where the stomach has been found ruptured, the death was sudden, and was not attended with hemorrhage, or rupture of any arteries or veins of importance.

HERNIA OF THE STOMACH, TRANSVERSE ARCH OF THE COLON, AND GREAT OMENTUM INTO THE CHEST THROUGH AN OPENING IN THE DIAPHRAGM.—M. Battalia has published, in the *Giornale delle Scienze Mediche della Societa Medico-Chirurgica di Torino*, the particulars of a case in which there existed a hernia of the stomach, transverse arch of the colon, and great omentum into the chest through the diaphragm. The patient was a powerful man, twenty-nine years of age, and accustomed to drink. One night before M. Battalia saw him, he had drank exceedingly hard, and had afterwards given way to venereal excesses. The face was red and livid, thirst intense, breathing difficult, breath fetid, almost continual hiccough, violent nausea, vomiting of matters apparently stercoral, pulse frequent, irregular, and rather depressed, heat of the skin below the natural standard, obstinate constipation, and sensation of burning, with slight pain in the right iliac region. It was supposed to be a case of strangulated hernia, but no external evidence thereof could be discovered in the abdominal parietes; there was found, however, a cicatrix on the right side of the chest, which the patient said had been caused by a sabre wound received four years previously. It did not appear to have penetrated deeper than the integuments. Notwithstanding the most energetic treatment, the disease continued to make progress, and the patient died forty-eight hours after the commencement of the attack. Autopsy. The body presented a slight degree of tension of the epigastrium, and of the two hypochondria, the rest of the abdomen was flattened, and its parietes retracted towards the spinal column. On opening the abdomen, the small intestine and the peritoneum were found of a livid red colour, and in some places nearly gangrenous. There were old adhesions between the peritoneum and the viscera, and the liver was much enlarged. In the cavity of the peritoneum there was a small quantity of serosity of a dull-red colour. It was then ascertained that the stomach, great omentum, and a part of the transverse arch of the colon had passed into the right side of the chest, through an abnormal aperture in the diaphragm, and on carefully opening that cavity, the entire stomach was seen greatly distended, covered, and completely enveloped by the omentum, and the transverse portion of the colon lying between it and the diaphragm. The right lung occupied the upper and inner part of that cavity. The thoracic viscera were perfectly healthy, but there was a small quantity of blackish-red serosity in the pleural cavity, resembling that found in the peritoneum. The hernial viscera were greatly inflamed, and so strangulated by the aperture in the diaphragm, that they could not be returned into the peritoneal cavity without great effort, and the previous removal of the fluid with which they were distended. The opening in the diaphragm was of an oval shape, with rather hard and irregular edges, and was situated transversely a little above, and to the right of the œsophageal aperture; it extended as far as the tendinous centre, which was slightly torn. Its transverse diameter was about three inches and a half in length, the longitudinal diameter two inches and a half.

America.

BLACK AND WHITE TWINS.—Dr. Cunningham records in the *Philadelphia Medical Examiner*, the case of a negress, who was delivered of twins, one black and the other white. He says, a negro woman, aged about forty-five, after having given birth to thirteen children during her life, none of which were twins, was during the last spring safely delivered of two at one birth, one being black, and the other white. He saw them when they were a few weeks old, and the contrast in colour, hair, &c., was indeed striking, so much so, that four-fifths of those who examined them were of opinion that the negress was not the mother of both, but that some deception was being played; the mother persisted, and still declares them to be her own. Dr. Cunningham remarks on this singular fact that a black woman may give birth, at one time, to a black child and a mulatto, but the occurrence is extremely rare, but a case like that under notice he considers to be a phenomenon as inexplicable as it is interesting. The editor of the *Philadelphia Medical Examiner* suggests that the white child is either a mulatto or an albino. *⁎* With due deference to the judgment of those gentlemen, the second child may be white, and yet the negress be a mother of both the black and white offspring; and it is explicable by the supposition that she had sexual congress with a negro and a white man very soon after each other. A somewhat similar case occurred some years since in Jamaica, the female parent in that case being a white lady. She was delivered of twins, one black and the other white, and the explanation she gave was that soon after fecundating intercourse with her husband, a black man entered her room, and forced her to submit to his wishes, under pain of death.

NEW FORM OF DIRECTOR AND GORGET.—Dr. Mettauer, in the *Philadelphia Medical Examiner*, describes a peculiar director and gorget which he employs in the operation of lithotomy, and which he claims as his own invention. The director has a dove-tail groove, and the gorget a globular beak. He says, being early aware of the danger likely to arise from the accidental escape of the beak of the gorget—or knife, if that instrument be employed—from the groove of the director during its passage into the bladder, especially with inexperienced operators, the dove-tail groove of the director and globular beak of the gorget suggested themselves to him as improvements which would prevent such an accident; and abundant experience with the instruments thus modified, conclusively establishes their value and utility in guarding against it in the most effectual manner. Simply inspecting the instruments, if they are properly constructed, would satisfy even the most casual observer that it would be impossible for the gorget to pursue any other direction than that of the groove of the director. The beak should be well-formed with a globular finish, supported by a peduncle of sufficient strength to guard against its being broken by any moderate degree of violence from a twist, or irregular movement along the groove of the director. The director should be fully six inches long in the shank, with a handle some three or four, and of a size to fill the hand, so that it can be firmly grasped and securely held; and the two branches must form a very obtuse angle, with the groove on the side of the vertex or point of the angle. The director and gorget he employs are delicately formed, and in his opinion should always be so constructed. A probe-point should always form the termination of the director, so as to close that extremity of the groove. His mode of operating is simply to form the perineo-urethral incision, directed by a staff carried into the bladder; and then to introduce the straight director

just described, through the incision fairly into the bladder, along the groove of which the gorget glides to form the second, or the urethro-prostatic section As soon as the straight director enters the urethra beyond the proximal angle of the first incision, the staff should be carefully removed from the urethra

CÆSARIAN SECTION.—Dr M. M'Culloch, in the *British American Journal of Medical and Physical Science*, describes the case of a young female, who became the subject of extra-uterine pregnancy, followed by ascites. After the lapse of a few months, Dr. M'Culloch tapped her, and drew off thirty-six pints of fluid. The child could then, *for the first time*, be distinctly felt under the integuments, and the position of its body and limbs easily traced. The dropsy did not return, but the patient continued to suffer from fever and debility, until the middle of the succeeding year, the third of her pregnancy, when putrid matter, mixed with quantities of hair from the child's head, began to ooze from the navel. The skin was inflamed a few inches round an opening which would admit the point of the finger, and nature was, in this way, evidently making a most interesting effort to expel the child, and save the life of the mother; but she had become so feeble and emaciated, as scarcely to leave a chance of her surviving a few days. Dr. M'Culloch, therefore, under the circumstances, proposed the Cæsarian operation as her only hope. At the same time, her alarm was much increased by observing two worms escaping from the navel, and she, without hesitation, agreed to submit. Being then six miles distant from the nearest professional friend, he did not, under the circumstances, consider himself warranted in waiting for assistance; but had her at once placed on a table, and made an incision in the linea alba extending five or six inches downwards from the navel, and removed a putrid child of the ordinary size of birth. She did not lose an ounce of blood, and bore the operation with courage. No vestige of a placenta remained, and the child was found in a sac that had formed adhesions all round to the walls of the abdomen, and appeared to be the Fallopian tube enormously distended and thickened. It contained, besides the child, a quantity of very offensive matter. Nearly all the bones of the toes and fingers were found detached, and some of them adhering to the sides of the cavity were carefully removed; a small tent was then placed at the bottom of the incision to favour the escape of matter, and its edges were kept in contact with adhesive plaster, supported with a bandage. She afterwards continued to improve daily, although the thermometer, at the time of the operation and for several days after, was upwards of 90° in the shade. Her progress, notwithstanding, from a state of extreme prostration to perfect health was so rapid, that she was able, without inconvenience, to be taken six miles to church a month after the operation. She has since enjoyed excellent health, and, without regret, remains childless.

EXTENSIVE DISEASE OF THE STOMACH. — Dr. Paul narrates, in the Transactions of the College of Physicians of Philadelphia, the case of a gentleman, fifty-nine years of age, to whom he was called, in consequence of his suffering from weight and oppression at the stomach, with tenderness on pressure, headache, &c. The treatment employed relieved these symptoms for a time, and he became apparently convalescent. Some tenderness on pressure in the epigastric and abdominal regions continuing, twenty leeches were applied, but drew very little blood. Collapse set in some time afterwards, and he died the same evening. The examination post-mortem was made by Dr. Paul, Dr. C. Morris, and Dr. J. Neill. The external appearances of the body generally were natural; some lividity existed about the extremities. The abdomen was opened through the linea alba: the adipose tissue was one inch in thickness. On displaying the viscera in their natural position, there was exhibited a slight adhesion of the omentum majus to the parietes, at the epigastric region. Large patches of coagulated lymph were found upon the great omentum, which extended to the left hypochondriac region, completely covering the anterior face of the stomach, and a portion of the spleen. The superior face of the liver was also found coated by a lamina of coagulated lymph, which could be removed in masses The peritoneum of the parietes of the abdomen exhibited a venous injection, and the cavity contained a pint or more of serum. The stomach was removed, and found to be exceedingly heavy, weighing probably one pound and a half it contained a thick fluid of a light-brown colour Its walls were about half an inch in thickness—the increase being principally in the cellular and mucous coats The cellular coat, near the cardia, was filled with coagulated lymph, which became less firm near the middle; at the pylorus, the cellular coat was distended to the same thickness with serum. The mucous coat exhibited great changes in structure and appearance—being much thickened and very firm; its hue was florid—the colour being deeper at the greater curvature. Its surface presented a very rough, granular formation, each projection being about the size of a grain of coffee, or larger. These were dense and unyielding to the touch, and more vascular than the surrounding tissue; they were more numerous at the greater curvature. The liver presented no unusual appearance in its glandular structure. A section of the upper part of the jejunum, and a section of the ileum, were examined; but presented no appearance of disease in any of their coats, except the injected peritoneum. The examination was interesting in many respects. It proved that, with such altered structures, the case was beyond the reach of medicine. It presented traces of great inflammation, with little accompanying pain. It presented abnormal structure, which must have taken time to form during, apparently, the enjoyment of good health. It shows that extensive disorganisations may take place in some tissues, without the occurrence of any symptoms by which their existence is revealed either the patient or his physician.

MALPOSITION OF THE KIDNEY.—Dr Diver, the *Philadelphia Medical Examiner*, describes malposition of one of the kidneys found in a subject brought for dissection. The kidney, which should have been found in the left lumbar region, was situated in the pelvis, immediately below the promontory of the sacrum. It was much smaller than the kidney of the right side, and derived its artery from the common iliac of the right side, about half an inch below the bifurcation. A deep sulcus was formed upon its surface for the passage of the renal artery. The convexity looked upwards, and the pelvis was much distended, owing perhaps to the gravitation of the urine. The distribution of the renal artery was very remarkable in this case, arising as it did from the common iliac of the right side Another peculiarity in the distribution of the branches of the abdominal aorta was, an arterial branch corresponding nearly in its origin to the inferior mesenteric, but which took a course along the lumbar vertebra without giving off any branches until it dipped down behind the bladder.

HYDRIODATE OF POTASH IN TYPHOID FEVER.—Dr. Voigt, in the *Philadelphia Medical Examiner*, describes a case of typhoid fever in which he exhibited the hydriodate of potash with marked benefit.

England.

[The following are the only articles of interest to the profession in the last No. of the *Lancet*.]

DISEASE OF THE HEART.—Mr. Hodson gives the post-mortem appearances observed in the body of a young man, of exceedingly intemperate habits, who came under his care, while in a sinking state. The principal symptoms were jaundice, diarrhœa, emaciation, and urgent dyspnœa. The liver was found to be in the first stage of cirrhosis; the stomach tolerably healthy, the lungs particularly so; the pericardium contained about seven ounces of serum. The right (?) side of the heart presented concentric hypertrophy of the left (?) ventricle with "vegetation" disease of the semilunar valves. Contained in the chamber of this ventricle, there were from fifty to sixty globular membranous sacs, filled with a puriform fluid, and varying in size from a pea to a small nut. They were slightly adherent to the walls of the ventricle by a small portion of their surfaces between the columnæ carneæ, the smaller ones being thus almost hidden, and the larger projecting into the chamber.

THE METHOD TO BE OBSERVED IN CONDUCTING POST-MORTEM EXAMINATIONS FOR LEGAL PURPOSES.—Dr. Letheby recommends the following plan to be adopted in conducting post-mortem examinations for legal purposes:—1. Record the name, age, and sex of the deceased. 2. Note the day and time at which the examination is made, and set down the period which has intervened since death. 3. Direct attention, as early as possible, to surrounding circumstances, as to whether there is any weapon or trace of blood near, any cup or bottle likely to have contained a poison, or any evidence whatever in the positon of things about the body to indicate a struggle or the cause of death. 4. Observe the position of the body Is it in bed or on the ground; and how does it lie?—or is it suspended? and so on. 5. Is the body naked?—or are the clothes on? and are these disturbed or torn? 6. Notice the position of the limbs. Are they or the fingers bent, as if convulsions had preceded death? Open the hands, and search for anything which may have been torn from an opponent during the death struggle. 7. Observe the appearance of the countenance, as regards its colour and expression. Are the eyes open or prominent? What is the state of the conjunctiva and pupil? Is the mouth open, or is there any foam about it? Does the tongue protrude, or is it bitten? Smell the mouth, and notice the colour of the gums Connected with this part of the inquiry it may be said that the countenance will often give an important indication of the cause of death, and of some of the circumstances which immediately preceded it. Thus, as regards its colour, it is mostly livid after apoplexy and death from hanging or strangulation, and pale from hydrocyanic acid, the mineral acids, and the alkalies, as well as from most of the vegetable poisons, from blows upon the epigastrium, or injury some vital organ On the other hand, it may be either pale or red after poisoning by carbonic acid, alcohol, or opium, and some other poisons. The expression of the face, too, is generally convulsive when there has been much struggle immediately before death, as during hanging, drowning, or poisoning by prussic acid, strychnia, and nux vomica; and it is often convulsed in cases of death accompanied by great hemorrhage. On the contrary, here is more frequently a calmness in the expression after death from apoplexy, opium, carbonic acid, &c., while the features are pinched, and there is an anxiety in the look after the action of the metallic and most vegetable poisons. The eye also is generally open, prominent, and glazed, after the effects of hydrocyanic acid, and prominent and injected after death from apoplexy and strangulation. Some authors, moreover, have described a suffused or even ecchymosed condition of the conjunctiva after death from arsenic. The foam about the mouth is very characteristic of prussic acid, while the bitten tongue would indicate a great struggle or convulsive action immediately before death. The gums put on a blue appearance after poisoning by lead, and the red or spongy gum, or even an ulcerated condition of the mouth, is often indicative of the action of mercury. It must be remembered, however, that the same appearances, together with extreme salivation, have been produced by other substances, as iodide of potassium, colchicum, fox-glove, croton oil, and some other metallic and vegetable substances. 8. Proceed to remove all clothes from the body, and observe if there has been any evacuation just before death, either from the stomach, rectum, or bladder, or if there has been an emission of seminal fluid. All of these appearances indicate convulsive action, and the latter, which is the common accompanyment of death from hanging, points to an irritation of the upper part of the spinal cord, and may serve to establish the fact of suspension before death, supposing that an opposite question were to arise. 9. Note the appearance of the body, whether deceased was fat or thin. Observe the colour of the skin, whether it is livid in any part, or if it presents any marks of violence, and if putrefaction has commenced. The colour of the skin is exceedingly pale when there has been much hemorrhage before death, or after starvation, &c., and it acquires a yellow tint after poisoning by lead and copper, it is often ecchymosed or covered with purple petechiæ after arsenic, and some wasting diseases. The dependent parts are generally very livid soon after death by hydrocyanic and carbonic acids and when

there is any mark of violence, this should be accurately described, considering by what means it was likely to have been occasioned, whether it could have happened by accident, or by the hand of deceased, or by that of another person In examining wounds about the throat, it is of great importance to notice on which side of the neck the wound is deepest, for this may indicate where the cut was commenced, and whether it was made from right to left, or from left to right dissect them also to learn what parts have been involved in the division. If there is any mark of a cord around the neck observe where the knot pressed, or where the cord was crossed; for one person would, in all probability, strangle another by crossing it behind, while in a case of self-murder it would most likely be crossed in front. Lastly, it is of great consequence to know whether the wounds or bruises were produced before or after death, and although this cannot always be confidently stated, yet there are circumstances which will often furnish very important indications,—as the absence or presence of coagula in the wound, or of ecchymoses around it, or of infiltration of blood, fibrin, or serum, into the surrounding tissue; Dr. Letheby remarks that most post-mortem wounds soon dry and discolour upon the edges, acquiring a brownish parchment-like appearance. With respect to the evidence furnished by putrefaction, most poisoned and plethoric bodies putrefy quickly, and especially those of persons who have died soon after a full meal, while, in the reverse cases, and after poisoning by arsenic, there is generally a delay in this process. 11 Can any opinion be formed as to the time which has elapsed since death took place? This is often a very important question, and may involve an answer having a certain day, or even hour, for its limit. The post-mortem signs are not by any means so constant in their occurrence, or so conclusive in their import, as to warrant us in making on all occasions such a positive reply. The evidence upon the subject may be collected somewhat after the following manner —(a.) Is there any warmth in the body? Dr Letheby found that adults cooled pretty constantly after this manner —the extremities lost their heat very rapidly, sinking to the temperature of the room in less than three, while the surface of the trunk has felt warm, even up to the twenty-fourth hour, and at this time, a thermometer, placed either in the axilla or rectum, has generally stood at somewhere about 70° Fahrenheit In fact, these parts have hardly ever lost the whole of their heat until after the lapse of thirty-six, or sometimes forty-eight hours. There are many circumstances, however, which may modify the order of things, as, for instance, the body would cool faster if it were exposed to a current of cold air, or immersed in cold water, children and very thin subjects cool sooner than adults, or corpulent ones. Again, when the body has remained in bed, or been well clothed, and surrounded by bad conductors, the temperature is retained for a somewhat longer time (b) Has the rigor mortis set in? It most commonly happens that the limbs begin to stiffen in about two or three hours after death, and the rigor is generally firm and complete after the lapse of seven or eight hours To this, however, there are occasional exceptions, as, for example, it is nearly always accelerated when the fatal event has been sudden, and when, immediately before death, there has been violent convulsive action, or a prolonged muscular exertion. In such cases the living spasm appears to pass at once into the dead rigor. Look, for instance, at the suicide, who is often found with the weapon firm in his grasp; and so with the murdered and the drowned, who frequently retain their hold of objects which had been clutched during the death struggle. Cases, on the contrary, now and then occur, in which the rigor mortis appears to have been delayed for a very considerable period Such, however, is rarely the sequence of sudden death, but is indicative of some inflammatory action immediately before death. (c) What is the condition of the cornea? In general the cornea becomes slightly clouded after the lapse of nine or ten hours. In about sixteen this condition is still more evident; it then gets somewhat lax, is easily indented on pressure, and when this is made upon the side of the eyeball, the cornea becomes still more opaque. In about twenty-four hours it commonly acquires perceptibly greater laxity, and in forty-eight it may become quite flat, and so opaque, that the pupil can hardly be defined through it. (d) Has putrefaction commenced? This is rather an inconstant event, and is liable to be interfered with by many modifying circumstances, such as the temperature of the room, the time of the year, the condition of the body, the cause of death, and whether it occurred soon after a meal or not, and so on. In about eight or ten hours after death the surface of the body, especially over the chest, and on the inside of the arms and thighs, puts on a marbled appearance, due to a turgescence of the superficial veins. In about sixteen hours, the dependent parts become livid or reddish purple, and after the lapse of twenty four hours this lividity is generally very marked, and the marbling on the chest and arms begins to acquire a purplish tint About the second day it assumes a brownish hue, and at this time the abdomen and groin show more evident marks of the putrefactive process, by acquiring a green colour. From this period it advances with more or less rapidity, according to attendant circumstances. In five or six days, the entire surface is ordinarily very green, and the venous marbling still strongly marked About this time, in warm weather, the epidermis begins to loosen, and the fluids acquire great liquidity, and gravitate to the dependent parts, through which they readily escape beyond this, the track of decomposition can scarcely be followed with any certainty. 12. What are the evidences which show that death has really taken place? (a) An absence of cardiac pulsation, and of the respiratory movements. (b) A loss of sensibility in the excito-motory system, as when the eyelids cease to wink on being touched, or the limbs and muscles to move on being pinched or pricked; one of the most powerful agents as a test of this function is galvanism. The muscles lose their faculty of contracting under its influence in about three hours after death. (e) The appearance of the rigor mortis, which generally sets in after about two or three hours (f) The loss of temperature in the body. (g) The opacity or cloudiness of the cornea. (h) The lividity of the dependent parts, and the mottling on the arms and chest. (i) The setting in of putrefaction. Of all these signs of death, the second merits the greatest consideration, because of the certainty of its import and of the early period at which it generally manifests itself.

13 Examine the head, and note if there is any bruise on the scalp, does the latter bleed freely as if its vessels had been congested? 14. Are the membranes of the brain natural, and is there any fluid upon or beneath the dura mater; note its quality and quantity and when there is any blood, observe if it is coagulated or not. Are the vessels on the surface of the brain gorged or not; and is the blood liquid or dark? All the considerations which arise from these inquiries will be well enough understood, but it is to be remembered that apoplexy, and, according to Dr. Conolly, epilepsy complicated with mania, will nearly always produce an extreme congestion of the vessels of the brain, and even in some instances effusion of blood between the dura mater and arachnoid. 15. Remove the brain, and examine it by making a series of thin horizontal slices, until it reaches quite to the base; observe if there has been any softening, or if there are any bloody points indicative of congestion, if any blood or serum has been effused into its substance, or into the ventricles, and what is the condition of the choroid plexus If the brain has not been examined in this careful manner, difficulties may arise in after stages of the inquiry, for no person can pretend to say whether it was diseased or not. 16. Examine the calvarium and the base of the skull for any fracture.

POISONING BY VERDIGRIS.—Dr. Moore describes an endemic inflammation of the stomach and bowels occurring among the Coolies on board ship from the carelessness of the cooks in not cleansing the copper vessels used for the food, the consequence being that poisonous doses of the salts of copper were mixed with the rice, &c, and numerous cases of enteric and gastric inflammation resulted, one of which terminated fatally. Wooden dishes and platters were afterwards employed The appearances after death in the fatal case were, on the internal surface of the stomach, from the cardiac to the pyloric extremity, and for a short distance on the internal surface of the œsophagus, near its termination in the stomach, extensive and deep-seated inflammation of the mucous membrane and subjacent tissues; the shades of red varied in different parts from a bright vermillion, or bright scarlet, to a deep red or violet colour. The patches of dark red approaching to a brownish colour were comparatively small and circumscribed, situated in general beneath the mucous membrane of the under surface of the stomach. The mucous membrane corresponding to these patches was soft, tumid, pulpy, but not excoriated, and free from the appearance of having sloughed. At the pylorus, the membrane was intensely inflamed, glistening, tumid, from a quantity of serous fluid exuded beneath the sub-mucous cellular tissue. In the duodenum, there existed the pathological appearances of a high state of inflammatory action: throughout the small intestines also there were decided traces of inflammatory action in the mucous membrane, although scattered irregularly over the surface. The mucous membrane of the large intestine presented, in like manner, an appearance of vascularity; in the rectum also, the inflammatory action had commenced, but was limited in extent. Within the peritoneal sac, somewhat more than eight ounces of saffron-coloured fluid were found the peritoneal coat of the small intestines—the jejunum and ileum, was numerously studded with minute circular dots, or specks, of a bright scarlet-red colour. On the upper surface of the arch of the colon, in its ascending and descending divisions, these inflammatory spots were extensively, but less numerously, scattered. Between the peritoneal and muscular coats of the stomach, an irregularly-shaped patch of effused blood was noticed, and on the lateral and inferior surfaces of the same viscus, vascularity of the peritoneal coat, and sub-peritoneal exudations of blood and lymph, were traced to a short distance. The folds of the intestine were not agglutinated together by lymph, nor were there any traces of it in the peritoneal sac.

Scotland.

DISEASE OF THE HEART.—In the *Edinburgh Medical and Surgical Journal*, Mr. Wells narrates, under the head of diseases of the organs of circulation, two cases of disease of the heart. The first is that of a marine, who presented all the symptoms of obstructed pulmonary circulation—blueness of surface, œdema, and turbulent action of the heart, with loud double bruit. He was relieved by bleeding, but the symptoms were afterwards aggravated, and the case terminated fatally. At the post-mortem examination both lungs were found extensively congested, and about a pint of serum in the left pleural cavity Four ounces of fluid were contained in the pericardium. The heart was much enlarged by hypertrophy and dilatation of all its cavities. The pulmonary and tricuspid valves were healthy. The aortic orifice was in a state of permanent patency from disease of its valves, which were covered by vegetations, and one was perforated, leaving a small opening The mitral valves were also thickened, and a small tumour the size of a pea had formed in one of their divisions. All the cavities were much distended by blood and fibrinous coagula. The liver was extremely congested. There were no other signs of abdominal disease. In the second case the principal symptoms were dyspnœa and palpitation, the pulse at the wrist and the brachial and axillary arteries of the left side being always almost imperceptible, while that on the right side was of the natural strength. A rough bruit de soufflet was often heard over the arch of the aorta, but was by no means constantly present. Death occurred suddenly. The lungs were found to be excessively gorged with blood. The heart appeared much larger than natural, but this was more from distension than increase of structure The auricles, coronary veins, and superior cava were enormously distended, and a considerable quantity of fibrine had formed in the ventricles. The aortic valves were hardened, thickened, and contracted; contracting also to some extent the aortic orifice. The ascending aorta, its arch, and a few inches of its descending portion were studded with atheromatous deposit

between the internal and middle coats, and the internal coat in some few spots had ulcerated. This deposit was most considerable about the origin of the left subclavian artery, and the mouth of that vessel was so much contracted as scarcely to admit the end of a small blow-pipe.

Pelvic Abscess from Ulceration of the Urethra.—Mr. Wells in the same paper, "a Report of Cases treated at the Royal Naval Hospital, Malta," describes the post-mortem appearances in two fatal cases, in which the strictured urethra had ulcerated. In the first case, one of previous stricture, the injury appeared to have been induced by a fall in which the perineum received the principal shock. The man died from the effects of extensive sloughing. On examination, the abdominal organs were found to be in a perfectly healthy state, without any signs of peritonitis. The cellular tissue of the pelvis, anteriorly below the reflection of the peritoneum, formed an immense sloughing abscess, which passed downwards on the right side, along the course of the cord to the perineum and recto-ischiatic spaces. On a metallic bougie being introduced by the urethra, it passed into this abscess through an ulcerated opening in the urethra, just where that canal passes through the triangular ligament. The urethra in this situation had evidently been the seat of chronic disease, its coats being hard and thickened. The edges of the opening were rounded off. The urethra at its external orifice was so small as scarcely to admit the smallest sized bougie; but after the first inch its calibre was natural throughout. The bladder was perfectly healthy. In the second case the disease was of a more chronic character, and the patient died, worn out by profuse suppuration. The genito-urinary organs were the sole seat of disease. A small stricture existed about one inch from the meatus, and from this to the membranous portion the urethra appeared healthy. At the latter situation the mucous membrane was black and ulcerated, and opened into a large abscess, which filled the space between the rectum and the bladder, and recto-ischiatic spaces. It was distinctly encysted, and its walls were black and fetid. The prostate was healthy, the bladder much contracted, and both ureters much dilated. The whole of the mucous membrane, from the membranous portion of the urethra, through both ureters into the pelves of both kidneys, was in a black sloughing state, and presented numerous points of ulceration. The kidneys were in an advanced stage of granular degeneration.

Gangrenous Inflammation of the Femoral Muscles.—Mr Wells, in the same report, describes a case, of which he says it was not all clear from the symptoms whether disease of bone, cartilages, or periosteum, erysipelas, or phlebitis, had been the primary disease. The patient was a marine, thirty-five years of age, who was admitted into the hospital with supposed rheumatism of the right knee. Matter formed beneath the deep fascia of the thigh; the femoral vein became knotty and swollen, and emphysema became very distinct in the inner part of the thigh, and afterwards extended above Poupart's ligament. Five openings were made, and excessive fetid discharge continued, notwithstanding the use of wine, porter, quinine, and generous diet. The man died exhausted. On inspection, fibrinous coagula were found in the right cavities of the heart, extending along the venous trunks. The vena cava ascendens was considerably distended by air, not fetid. The internal iliac veins on each side were healthy; the left external contained some partially adherent clots, and the right was completely occluded by fibrinous clots which were slightly adherent to the reddened internal membrane. The femoral and popliteal veins on this side were in a similar condition. Scarcely a trace of any of the muscles of the thigh remained; the bone, covered by shreds of gangrenous cellular and fibrous tissues, running through the centre of an enormous abscess with sloughing walls. At the popliteal space the cavity of the knee-joint communicated with the abscess, and was filled with the fetid debris of the tissues of the thigh; the cartilages of the articulating surfaces of the femur, patella, and tibia, being in a great measure removed. Extensive superficial necrosis of the femur had taken place. No purulent matter was found in any of the veins, nor any purulent deposit in any of the organs. The knee-joint was the only one which had been the seat of disease.

Cellulitis Venenata.—In the same report Mr. Wells details at some length the particulars of a case of cellulitis venenata caused by a dissection wound in opening the body of a patient dead from phthisis. The disease terminated fatally five days after admission into the hospital. The treatment adopted at first was antiphlogistic, and afterwards stimulant. On examining the body after death, the heart was found very much distended by fibrinous coagula, which adhered very firmly to the walls of its cavities. There was also some hypertrophy of the left ventricle, old adhesions of both pleuræ superiorly and anteriorly, and extensive infiltration of both lungs with bloody serum. The cellular tissue of the right hand, forearm, and part of the upper arm, was thickened and infiltrated with a dark-coloured serous fluid. From the dorsum of the carpal phalanx of the index finger, the wounded one, a vein filled with purulent matter passed to the superficial radial vein, and on to the median cephalic. As this vein proceeded up to the forearm, coagulable lymph lined its internal coat in distinct layers, which became thicker before the junction with the medium basilic, and there so completely plugged the vein, that the entrance of purulent matter into the deeper veins was prevented. The blood for some distance along the brachial veins was clotted, and their internal coats reddened. Nothing was observed in the course of the examination which could lead to the inference that purulent matter had entered the general circulation.

Purpura.—In the same report Mr. Wells records a case of purpura, which terminated fatally, stupor, stertor, and other symptoms of cerebral effusion, occurring shortly before death. The post-mortem examination showed the vessels on the superior surface of the brain turgid with dark fluid blood. The substance of the cerebrum and cerebellum was healthy, with the exception of the parts around the right lateral ventricle. This cavity was distended by about two ounces of blood, partly fluid, partly dark adherent coagula. The greatest quantity was in the posterior horn of the ventricle, and the surrounding cerebral tissue was softened and broken down. A considerable quantity of blood had made its way through the softened cerebral tissue, and diffused itself beneath the arachnoid, around the convolutions in the cells of the pia mater. The effusion had apparently proceeded from the choroid plexus, which was much enlarged, pale, and very fragile. The left ventricle contained only bloody serum, but the blood itself had extended into the fourth ventricle. The lungs, pericardium, heart, and the external surface of the liver, were studded with purple spots. There was slight dark-coloured injection of the small intestines, principally in the duodenum, and the mucous membrane of the stomach was injected throughout in the punctated form. The spleen and pancreas, and also the kidneys and bladder, were healthy.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

By G. J. GUTHRIE, F.R.S., &c.

INTRODUCTORY LECTURE.

Gentlemen,—I have long promised to write one or two more books in connection with the many different points in surgery which I have already noticed. My record of the "Surgery of the Peninsular War," for instance, is incomplete. That part which relates to the injuries of the chest, the abdomen, and the pelvis, is scarcely known except to those who formerly attended my lectures; and the consequence is, that many students are unacquainted with the improvements introduced into the treatment of them during that war, although thirty years have since passed away. Many of the gentlemen who come before me at the Court of Examiners of the College of Surgeons are exceedingly ill-informed on these subjects, although they have fairly studied many others. Some do not even know when a man is stabbed on the right side of the chest, whether he should lie on that side, or on the other, or on his back, and even if they should answer correctly, it is by no means uncommon for them not to be able to give a reason for the selection. If they seldom know this, the very first step to be taken in the treatment of these injuries, it may readily be inferred how little likely it is, that they should know other and succeeding parts more accurately. I can safely say that scarcely one student I have examined, in the eighteen years I have been an examiner, has been able to tell me the proper treatment to be pursued with regard to an incised wound in the chest, into which the lung had protruded, even if he were able to describe what ought to be done when it did not. When I was first elected into the Council of the College of Surgeons, an honour conferred upon me at an earlier period than had ever befallen any other person, not on account of any merits of my own, but from the reflection of those of others which I had been the means of placing on record, the elderly gentlemen were, it is said, but little acquainted with these injuries. Sir Peter insisted that every man should be bled, because he had the misfortune to be stabbed—Sir Roger, that he should be thoroughly physicked, in order to allow of a free descent of his diaphragm—and Sir Richard was for keeping his wound open, that the secretions might readily flow out, until the proper time for duly closing it should arrive. If the bleedare, the purgare, and the clysterisare system did not suffice, it was admitted that there was nothing better to be done than to rebleedare, repurgare, and reclysterisare, as Moliere and his associates had recommended to be done before. The grinders of the present day instruct their aspirants to close such wounds without delay, to eschew calomel and jalap as incompatible with the absolute rest such cases require, even if the diaphragm should not descend with perfect freedom, and not to bleed in expectancy.

Wounds of the abdomen were not in more fortunate consideration. The elder surgeons brought the edges of a cut in the wall of the belly of three inches in length, into some sort of apposition by two stitches of several good thick threads, introduced at equal distances through the muscles down to the peritoneum, but woe to the man who thought of touching this inner lining. Having been thus stitched up, which was of itself enough to aid him out of this world—if the accident itself had not been sufficient—he was then to be thoroughly well physicked, and bled ad libitum.

An accomplished grinder now disapproves as much of a stitch in a muscle as the surgeons of old did of one in the peritoneum, and as he crams in turn his expecting students with the peculiar doctrines of Mr. A. or B., he teaches them to sew up the skins, and the skins only of their patients, exactly as their mothers would do a hole in their best pocket-handkerchiefs. He inveighs against salts and senna, and protests that they do not accord with that state of quiescence which can alone save the patient.

Surgery has followed in the wake of other things, and has yielded to the dictates of experience, founded on observation. It has been, however, somewhat slower in its progress than other matters of science which are commonly valued at a higher rate, than the art of saving life.

Gentlemen who have accidentally seen one or two cases of wounds of the chest, have sometimes thought themselves at liberty to lay down what they call principles to be followed in all cases of the kind; and it has been a matter of surprise to many to find their precepts doubted by those who have had greater opportunities for observation than themselves. Few, like my late learned friend, the professor of military surgery in Edinburgh, have the candour to acknowledge the erroneous nature of the opinions they had been taught, or the honesty to avow that they were altered. I think it was a Whig Government that created, very many years ago, the office of professor of military surgery in the University of Edinburgh, to reward the services of a zealous medical supporter, resting their defence of the new appointment upon the grounds

that the individual in question, being a civilian who had never seen a shot fired, nor any sort of military service, was at least open to conviction and improvement—that he was a sort of tabula rasa, as far as experience was concerned. The professor was really a learned and a most honourable man, and an able surgeon, and taught what he did know in a manner which gained him universal approbation. Nevertheless, there were some things he did not profess to know too well; and when the battle of Waterloo was fought, he was glad to avail himself of such an opportunity of acquiring information, and hastened to Brussels, with a full recollection in his mind of Mr. J. Bell's work on Wounds of the Chest, which he had particularly studied and admired. One part of this treatise is elaborately written; the description of the inflation of the whole of the cellular membrane of the body which ensues after a gun-shot wound of the chest, is so truly graphic, so beautifully described, that it is even now frequently referred to as an admirable specimen of surgical writing. An unfortunate man, lying with a musket-ball in his chest, and gradually swelling up, until he parodies in appearance the ambitious frog in the fable, naturally attracted the sympathy, and lived in the recollection of every one. When the learned professor reached Brussels, his first question to me was, "Did you see many of the cases of emphysema so well described by Mr. John Bell in his admirable book on wounds, when you were in the Peninsula? How many are there here? You must have heard of every good case—do show me some of them." I replied, with all becoming gravity, that the last case I had seen of general emphysema was at Tarbes, after the skirmish which took place in front of that town. A poor creature was brought into the square before my door, one morning, apparently dead. He was carried by three men, with long white sticks in their hands, followed by a fourth with a pair of bellows. The three first had scarcely put him down, when to my astonishment they began to strike him smartly with the sticks, and the fourth, before I could get down to interfere in his behalf, had cut a hole in his skin, near the bottom of his back, into which he introduced the muzzle of the bellows, and in an incredibly short space of time had blown him up to thrice his natural size. The incredulity shown by the worthy doctor at this relation of my case rendered it necessary for me to explain that the patient was a calf, and that the four butcher boys had in three minutes fairly outdone John Bell. The professor and the friends who accompanied him declared I was laughing at them, and could scarcely credit my assurance that I had never seen such cases as the late Mr. J. Bell had described, and that they would nowhere find them, except in Mr. John Bell's book. The doctor was, however, easily satisfied they were not to be found in Brussels. He soon understood that a musket-ball makes too large a hole to admit of such a thing taking place, although it possibly may occur from a stab, or small hole, which may not prevent the closing of the external opening, whilst the inner wound into the cavity of the chest, communicating with the lung, remains pervious. The learned professor smiled on hearing this explanation, and said, "I am afraid I have much to learn, and more to unteach"—an acknowledgment which did him honour. He remained at Brussels long enough to make an epitome of all the interesting cases he saw, which he published on his return, and by it gained great credit. The result to himself was not bad, and there is certainly no ill-will in the story, although perhaps there may be some little satire in telling it. The Tories were in office on his return, and were determined not to be outdone by the Whigs, in rewarding a meritorious servant. They thought that as their political opponents had made him a professor when he knew but little of the subject he was to teach, something ought to be done for him when he had well qualified himself for the office. They therefore made him a staff-surgeon, the full pay of which he enjoyed for a long time, and the half pay until his decease. You may learn from this anecdote, that a good surgeon and a zealous politician are sometimes not incompatible nor disadvantageous qualifications.

There are few occupations more troublesome than printing or publishing books when the stimulus of necessity is wanting, and when the subject precludes all hope of pecuniary profit. My publishers for instance, persuade me to pay for the paper and printing of a book, as a first expense, and then to allow them 10 per cent. commission for taking care of it, which, together with 30 per cent. allowance to the retailing booksellers, with the additional advantage of receiving thirteen as twelve, makes 50 per cent., leaving 50 to pay for paper, printing, and advertisements. Direct profit is not therefore to be thought of from a book on wounds, &c.; the indirect profit, it is said, might be incalculable, if people were not so seldom shot or run through the body as to indispose them to buy books which treat of such matters. I willingly pay for a book that people will buy on more common complaints, or accidents in which they may be immediately interested; but I have been careless of doing so for those which are not likely to pay either directly or indirectly. I now content myself by allowing my opinions to appear before the public through the medium of such of the weekly medical journals as may please to publish them.

The treatment of wounded arteries is not better understood by students in general. They can all answer that a ligature ought to be placed above and below the wound in the artery, or on both of its ends when divided; but try them on the means to be adopted in a punctured wound of the axillary artery, or of the femoral, or in a case of wound of the calf of the leg, in which it is doubtful whether one or both of the arteries are injured, and they are lost. If they fly for assistance to Mr. Hunter's theory for the cure of diseased arteries, they will find a method of proceeding which is never successful when put in practice for a wounded artery, or at least so seldom successful as to form only an exception to the general principle already mentioned, and which can never be departed from without imminent danger to the limb, if not to the life of the patient. It is not less extraordinary than true that different principles, as they are called, are taught in different schools of surgery in London, and my examinations on these points frequently become courses of instruction, instead of inquiry, and I am in consequence obliged to exercise a leniency, when about to pronounce sentence of approval or rejection, which often materially interferes with my sense of public duty.

Anatomy has its little differences as well as surgery. The learned professors of school No. 1 teach that a femoral hernia descends into the sheath of the femoral vessels. The no less learned professors of school No. 2 declare that it is on the contrary, projected against the part only which is going to form the sheath, and that it descends in a separate tunic of its own, by the side of, but distinct altogether from, the sheath of the vessels. With these gentlemen I concur in opinion. The very able professors of school No. 3 teach that this same femoral hernia comes out in the thigh at the saphenous opening. The equally able professors of school No. 4 declare that it has little or nothing to do with the saphenous opening; to which opinion I assent. The most perfect of grinders cannot get over this. He is obliged to beat two opposite opinions into the heads of his *élèves* in the morning, and two more in the afternoon, that he may be able more conveniently to cram them again all round with the whole four in the evening. How can this be settled? One of the medical bills lately introduced into Parliament, but which did not long remain there, provided for the establishment of a Council of Health, so called on account of its having nothing to do with the health of any one person whatever, but which name was possibly selected because no one could suspect that, to a body constituted under so unassuming—nay, benignant—a title, powers were to be granted of a more arbitrary and oppressive nature, more subversive of the rights and best interests of individuals than any which have been conveyed by any other act of Parliament. One of the clauses of this bill empowered this council, or medical inquisition, as it ought to have been called, to ascertain whether the examiners of the different colleges did their duty to the satisfaction of the council. If they had not done so, men of only ordinary minds might perhaps have thought it right to give authority to the council to admonish the examiners. The authors of this bill thought otherwise. They empowered the council to punish the students, to refuse them (although declared competent by the examiners) their authority to practice, without which they could not legally do so; and thus, in fact, to destitute them, to turn them out to starve, until the examiners should acknowledge their errors, and amend their ways. If any of these bills should re-appear, I will do my endeavours that a clause shall be inserted by which these anatomical differences may be quickly adjusted, and the provision to be made for this might be, "that until the professors can agree upon anatomical facts which admit of clear and easy demonstration, the students shall be annually cobbed, at the end of each session."—one clause being a *pendant* to the other.

The war in the Peninsula terminating, it may be said, by the battle of Waterloo in Belgium, added much to the character of the British army, and to the military renown of the nation, whilst the miseries caused by, and attendant upon it, have led to the improvement of the art and science of surgery in a degree which neither could or would have been effected without them. My late friend, Sir Astley Cooper, took pleasure in declaring that the practice of that war had given to surgery its greatest impulse in the present century, and the admission showed an honesty and nobleness of disposition it would well have become others to have imitated.

Engaged from the first battle on the heights of Roliça, to the last of Toulouse, and subsequently at Waterloo, generally in the field, or in charge of a principal part of the wounded afterwards, there was no one who, from his labours or his opportunities, had a better right to take upon himself the humble office of recorder and historian of the surgery of that war. When I undertook this duty, thirty-one years ago, I laboured under one great defect, to say the least, which time has however removed. I was not twenty-nine years of age. I had wrung from the authorities at home the inspectorial rank I held by dint of hard work alone, and I was afraid of giving offence to those I had distanced in the course by assuming anything to myself. Nothing, therefore, could be more humble and unassuming than the expression of my views in the first and second editions of my book on Gun-shot Wounds, and the Operations of Amputation. They were followed by so much change in the opinions of the profession on the points to which they adverted, that whilst few objected, and none refuted, some were not ashamed to appropriate an improvement or two as their own, and to sneer at what they were not equal to disprove, or to overturn. In 1827 I published the third or greatly enlarged edition of my treatise on Gun-shot Wounds, on Inflammation, on Erysipelas and Mortification, on Injuries of Nerves, and on Wounds of the Extremities requiring the great operations of amputation of the hip-joint, shoulder-joint, &c., with a preface, in which I *then* felt it right towards the medical officers of the army to claim for them the improvements they had introduced. It is as follows:—

When I printed the first edition of this work, in 1815, I stated, that it contained "many opinions in opposition to those received in common by the profession, and even now taught." I also said, that in publishing them I was desirous of making known "What had been the practice of the surgeons of the British army during the Peninsular war, and to preserve for them the credit of the improvements which they alone have introduced into the science and art of surgery, and particularly in the operative part, in which they have been eminently successful." In referring to my professional brethren that credit which was their due, I by no means wished to exonerate myself from any blame that might be attached to the practice recommended, for I was aware that some of these opinions were not common to the whole, and for those in particular, as well as for every one of them, I held myself responsible. I was contented to allow them to find their way as unobtrusively as possible into the world, satisfied they would stand the test of investigation, and be ultimately adopted as principles. In this I was not mistaken: they have not only been generally adopted, but pirated by some persons, and even advanced as something new by others, many years after I had published them. In order to put a stop to such proceedings I shall now enumerate those points in which surgery is indebted

for its improvements to the medical department of the army and the practice of the Peninsular war; and in doing so I trust I shall redeem the pledge given to the medical officers of the different branches of the public service in the introductory lecture to my first course of lectures on surgery, in 1816, that I would always defend and maintain their right to the improvements they first suggested or made against all encroachment."

"Previously to the termination of the war in 1813, and the appearance of the first edition of this work, the opinions of Mr. Hunter on the powers and capabilities of the human constitution were invariably received. As general principles they did little mischief; but when they came to be acted upon, the results were not found to coincide with the principles from which they were deduced. When an injury had occurred to a person in health, rendering the loss of a limb necessary, he recommended that an operation should not be performed until after suppuration had been established, a period, probably, of six weeks, which, even if the patient survived, was often found to be too late to be serviceable."

"From the failure of this practice, the contrary one of immediate amputation, became gradually more general during the war, and at its close I not only advocated and established the propriety of it, but examined the reasoning on which Mr. Hunter's opinions were founded, and I trust have proved it defective. That it was so ought indeed to be presumed, when the facts were found to be opposed to the reasons."

"It was not, however, on the single point of amputation that this reasoning led to error, it embraced the whole subject of inflammation and its consequences, which I believe can only be consistently viewed on the principles regarding the human constitution which I have advanced. The variations in the nature and appearances of erysipelas may through them be more easily comprehended, and the treatment of mortification more scientifically undertaken. The Baron Larrey has shown, in opposition to the received opinions of the schools, that in gangrene from wounds, amputation might occasionally be resorted to with success during its progress; but he did not explain that this was entirely dependent on the circumstance of its being local. The division I have made into constitutional and local mortification, and the practice I have indicated to be followed in the different species of gangrene, from whatever causes they may have originated, as dependent on this distinction, are improvements which many are inclined to adopt, without being aware to whom they are indebted for them. There is still, however, in some, an unaccountable slothfulness in neglecting all inquiry into this subject, whilst there is in others an obstinate adherence to the old practice, although unsuccessful."

"The practice of the Peninsular war led, however, to another important result in surgery; it dissipated that delusion which had so long obtained possession of the minds of surgeons of every description, 'that it was impossible to command the flow of blood through the great arteries.' I overturned at once this hypothesis—declared it to be visionary, and not only without foundation, but the reverse of fact. On the return of the medical officers of the army to London, in 1814, it was not a little amusing for them to hear teachers of surgery gravely informing their students that amputation at the shoulder-joint was a most formidable operation, on account of the impossibility of effectually preventing the flow of blood through the arteries; and when they did notice amputation of the hip-joint, it was only to declare it a murderous operation. What is the state of things now? What has the short space of twelve years done for this branch of surgery? Why almost too much. The facility with which these operations can be performed, and the safety which attends them, has been shown, and all alarm has been banished from the minds of surgeons on these points. It is now to be feared that they may become unmindful of the precepts I have laid down demonstrative of their necessity, and recommend them to be performed when others less important might suffice."

"The practice of the Peninsular war was decisive on many other points. It overturned the application of the theory of aneurism to the treatment of wounded arteries, and my paper on wounded arteries, published in 1811 in the new *Medical and Physical Journal*, demonstrated the necessity which existed for performing the operation at the wounded part of the vessel, and not at a distance. It showed, what is not yet well understood by many, that in no case (and this is without exception) should one ligature above the wound in an artery be depended upon, but that another should be applied, if possible, below it."

"I have proved from official documents that the great dread entertained of secondary hemorrhage in gun-shot wounds was groundless, whilst the practice in all cases has been established on more certain principles than before."

These and many other minor points I do not think it necessary to notice. A careful examination of the books which existed at the commencement of the Peninsular war, and a comparison of them with the observations there made on the same subject will show in what part the alterations and improvements have taken place, whilst the work, from its continued reference to the different periods of the war, demonstrates the fact of the particular time at which each of them was established, if it does not mark that at which they originated"—June 18, 1827.

The experience of the last thirty years in London, during which time I have enjoyed a share, I fear beyond my deserts, of hospital and of private practice, has confirmed the accuracy of these statements, and although I trust some improvement will yet take place in many until they attain perfection, I shall not be disposed to abandon one of them until a superior degree of information on these points be shown, which at present I do not anticipate, but which I shall most gladly acknowledge.

There is not, in fact, one word in that preface which is not true. Since 1827 nearly all my old friends and fellow labourers have passed away. I am the more bound to protect their memories. There are none to be annoyed by any stories I may now tell, by any errors to which I may allude. They have long since expressed their sense of the services they were pleased to say I had rendered them by my records and lectures, in the kindest and most liberal manner, and although I have been careful to claim little as personal to myself in all I have written, or shall do in what I have yet to write, or to say, no one of them has disputed, nor will any of those who remain dispute any assumption I may make as to how much or how little is my own.

Professor of Anatomy and Surgery to the College of Surgeons during the four years ending in 1831, I published the principal part of the lectures I had delivered during that time: On the Diseases and Injuries of the Arteries of the Human Body; on the Operative Surgery of the Eye; on some Points connected with the Anatomy and Surgery of Femoral and Inguinal Hernia; on the Anatomy and Diseases of the Urinary and Sexual Organs. In 1833: Lectures on the Treatment of Compound and Gunshot Fractures of the Extremities; on Excision of the Head of the Thigh-bone, the Arm-bone, and the Thigh-bone. In 1841, again Professor of Anatomy and Surgery to the College: on Injuries of the Head affecting the Brain. Very early I had recorded an improved method of Treatment of Syphilitic Diseases without Mercury, &c. Some of these books have gone through three editions, and most of them are out of print.

In the course of the lectures I am about to give in this and the ensuing year, I hope to be able to draw your attention to all the points I have hitherto omitted, and to advert to many of those I have noticed which appear to be of most importance. I shall begin with the injuries and wounds of arteries, including the operations required to their cure, with the hope of attracting the attention of surgeons and students more fully to the essential points to be observed in their treatment. These will be followed by an inquiry into the wounds and injuries of the chest, the abdomen, and the pelvis, with the operations required for breaking up, and for extracting a stone from the bladder.

It may be, in conclusion, some satisfaction to you to know, and it is not less satisfactory to me to declare, that none of the opinions I have advocated on behalf of my old friends, most of whom are no more, are disputed or disallowed by any of my colleagues of the Court of Examiners of the College of Surgeons, as far as I am at present aware. There is no practical point positively recommended which all of them have not admitted, and have required all students to acknowledge, up to the retirement of my old friend, Mr. White. That some of these opinions may hereafter be found capable of improvement, and requiring alteration, I am willing to admit. All I desire of you now is, that you will believe, until opportunities for observation shall occur, which may enable you seriously to doubt.

A Course of Lectures on Hernia,

By JOHN FLINT SOUTH, Esq.,

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(Delivered in the Theatre of the College, and revised by the Professor for the MEDICAL TIMES.)

Lecture I.

(Concluded from p. 12.)

Can a Rupture be cured spontaneously?—Cloquet's Opinion, Professor South's Views. Is there any Mode of Treatment which holds out reasonable expectation of a permanent Cure? Operations proposed and attempted for this purpose; Bonnet's Method; Mayor's Operations; Velpeau's Injection plan; Observations on Two Cases, by Demeaux; Effects of Continued Pressure—Advice of Langenbeck, Boyer, Lafond, Raven; Ancient Methods—Paulus Œgineta, Franco, Ambrose Paré, Guy de Chauliac; Other Methods Proposed by Petit, Freitag, Richter, Graefe, Walther, Schreyer; Actual Cautery applied by Paulus Œgineta; Arabian Operations; Opinion of Monro Primus on the use of Caustic; Kein of Vienna; Tying the Cord and Sac, practised in the Middle Ages; Removal of the Sac, proposed by Lanfranc and Bertrandi, and practised by Astley Cooper; blocking up the mouth of the Sac, practised by Dzondi, Jameson, Gerdy, Bransby Cooper, Signoroni, Wutzer, Belmas, and Malgaigne; Professor South's Opinion of these Operations.

It is a very interesting and important question, whether a rupture can be cured spontaneously? Cloquet asserts that it can, by the spontaneous return of the rupture-sac into the belly, in four different ways. First: by the contractility which the sac possesses, in common with other tissues, which continually tends to its restoration upon itself after distension, and is occasionally sufficient to produce its gentle and gradual return. "The sac, then," says Cloquet, "takes a retrograde movement to that of its formation; the peritoneum passes from the ring towards the parts it had left; that portion of it which had been drawn towards the ring, without passing through it, pulls the neck in every direction, which expands, turns out in some degree, disappears, and is at last effaced; the sac unfolds, and again covers the wall of the belly near the aponeurotic opening. The neck of the sac which was last formed disappears first, whilst its bottom disappears last, and with great difficulty; so that the reduction is often incomplete. When a rupture has been thus reduced, the remains of the neck are sometimes observed at a little distance from the ring, in the shape of irregular stigmata, whitish and more or less opaque. The peritoneum which formed the sac is restored to the abdominal wall. * * * Sometimes these sacs are so completely effaced, that no trace of them can be found in the peritoneum covering the ring, by which they had escaped; the only indication of a rupture having existed at this spot, being a cellular whitish empty pouch arising from the aponeurotic ring. Secondly: by the closure, the gentle and insensible contraction of the cellular tissue, external to the sac. The other tunics may concur also; but their action appears weaker and less demonstrable. * * In this case the peritoneum presents at the top of the ring irregular prominent folds analogous to those of the mucous membrane of the stomach during the contraction of its muscular coat. Thirdly: by the displacement of the peritoneum from the abdominal walls from various causes, as

in two cases of direct inguinal rupture, in which, in consequence of retention of urine, the peritoneum covering the bladder was raised nearly to the navel —by enlargement of the womb by pregnancy or by any other cause—by adhesion of the omentum, or intestine to the hernial sac—by a large quantity of fat collected between the peritoneum and wall of the belly, by the dragging of another sac which has formed in the neighbourhood of the former. Fourthly: by the contraction of the cremaster muscle, "the two fleshy bundles of which act upon the sac pretty much as the two bellies of the digastric muscle effect the direct elevation of that bone."

The spontaneous subsidence of the peritoneal or true sac of the rupture from either of these causes, or in either way described by Cloquet, appears to me extremely doubtful, and very improbable, excepting perhaps the third, in which the original sac is said to be retracted by the descent and enlargement of a second and subsequently formed sac. That this is possible cannot be denied; but the production of a second sac, especially in the immediate neighbourhood of one already formed, is so rare, that it can hardly be presumed on as a cause of spontaneous cure

If it be admitted that a rupture is rarely cured, except in young persons, by the ordinary use of a truss, and that its spontaneous cure is scarcely to be expected, the question then arises, must the person who has been attacked with this inconvenient, and it may be, dangerous disease, be left without hope of other than a palliative and not unfrequently inefficient remedy, or is there any mode of treatment which holds out reasonable expectation of permanent cure?

Surgeons have from an early period sought to effect this object in various ways, many of which have been accompanied with considerable danger, and scarcely any attended with success, as may be presumed from the great variety of plans proposed, and the modifications with which they have been carried out.

The greater number of the modes of treatment for effecting this—THE RADICAL CURE—have purposed the obliteration of the mouth or neck of the sac by adhesion, either by quick union, or by granulation, and a few by blocking up the passage into the belly by a plug of skin.

1st. The most simple and lenient treatment is that of continued and considerable pressure with a pad upon the mouth and neck of the rupture-sac, the contents of the sac having been first returned, and the patient kept in bed upon his back for several weeks, whilst the pressure is continued. To render the pressure more effectual, Langenbeck advises the application of a conical pad upon the abdominal ring, into which it is to be kept thrust by the pad of a common truss, till ulceration of the skin takes place, when the conical pad is to be removed, the sore dressed with lead ointment, and the truss to be reapplied for at least a month. The irritation of the skin which is excited for the purpose of producing inflammation of the cavity beneath, is by some kept up and increased by the application of spirit of turpentine or blistering ointment, or even of caustic contained in a hollow pad. To render the pressure more certain and severe, Raven recommends the use of an apparatus by which the pad can be screwed down tightly upon the part, and wetting the pad with alum wash. Other astringent remedies as bark, oak-bark, tormentilla, gall-nuts, and the like have also been employed to contract the skin, and to bring the walls of the sac together, and induce their union.

2nd. The ancients attempted the cure of rupture by cutting through the skin upon the swelling to the extent of three fingers' breadth, removing the membranes and fat, till the peritoneum was exposed, and then, having returned the contents of the sac into the belly, the peritoneum was raised with the point of a knife, and tied first on one and then on the other side without either cutting it away, or the testicle. This practice is described by Paul of Ægina, as old in his time. Subsequently the sac and spermatic cord were included in one common ligature, but this was afterwards improved on, by dissecting down to the sac, separating the cord from it, and encircling the sac with a golden thread, which was drawn sufficiently tight to close the cavity—an operation dignified with the name of the "golden puncture." The same was done by Ambrose Paré with a leaden thread, and this has been in modern times superseded by the use of waxed threads. Another mode of obliterating the sac was that of sewing it up with the glover's stitch, which was called the "Royal stitch."

The radical cure of rupture upon the principle of bringing the sides of the sac together, and promoting their union by inflammation, has also been attempted within the last few years by Bonnet and by Mayor.

Bonnet, after reducing the rupture, grasps the scrotum as close as possible to the abdominal ring, and, separating the sac and spermatic cord from each other, by nipping the thumb and forefinger tightly between them, passes a pin thrust through a piece of cork in front of their nails, behind the coverings of the rupture, close to the suspensory ligament of the penis, from above and behind, forwards and downwards till the cork touches the skin, and the point of the pin penetrates below, and is received into a second piece of cork, upon which it is twisted so as to produce slight compression of the included parts. The spermatic cord is then confined by the thumb and finger closely to this pin, after which a second pin, similarly headed, is passed about six or seven lines to the outer side of the former, and parallel to it, and being thrust through the skin, is fixed also in a piece of cork. Suppuration usually comes on about the fourth day, and the pins require removal between the sixth and twelfth, in proportion to the degree of inflammation set up. Three weeks or a month are considered sufficient for the cure. This operation does not appear to be very hopeful, as it can scarcely be supposed to produce adhesion of the inside of the sac.

Mayor's operation is a modification of Bonnet's. Having very completely returned the rupture, and passed the finger into the abdominal ring to ascertain its size, as the larger it is, the longer, wider, and more extensive must the fold of skin be; he marks the middle of the gaping ring with a pen and ink, varying the direction of the mark, so that it may be slightly oblique from above downwards, or parallel to the mesial line, according as the rupture is crural or inguinal, umbilical or ventral, and its length corresponding to the ascertained or presumed diameter of the ring, behind the upper edges of which it should extend from three to five lines, and the same distance beneath the lower, according to the bulk of the rupture. He then grasps with both hands a portion of skin on each side of this mark, which is to be raised till the ends of the mark are completely above the finger-ends, whilst an assistant thrusts a needle armed with a waxed double thread, which is guarded at the other end by a piece of sponge, bougie, or wadding, to serve as a knot, and thrusting it through the folds beneath the surgeon's nails, draws the double thread up to the knot, and then, separating the two threads, ties them upon another piece of sponge or bougie on the other side, and thus makes a quill suture. The number of stitches varies from three to seven, according to the size of the rupture. Their object is to produce adhesive inflammation around and within the ring. In slight cases no more is requisite, but otherwise slight compression may be made with a truss. The sutures are left in for eight days or longer, and Mayor does not meddle with them until the patient complains, and is never in a hurry to withdraw the threads.

3rd. Other surgeons have cut into the sac, as in operating for strangulation, and treat it with a dressing of lint, and pressure with a truss; or have scarified the mouth of the sac; or even introduced tents of lint, as advised by Dionis, and practised even of late by Graefe and Walther.

4th. The adhesion of the sac has also been attempted by injecting wine, on the authority of Schreger, as in the cure of hydrocele; or its inflation with air—the mouth of the sac in this case being closed by pressure.

Velpeau, having ascertained, as he believed, that congenital hydrocele might be cured by injection without danger, thought it probable that a rupture might also be safely cured by the same means, and accordingly in two cases of congenital entero-epiploic rupture, an acute hydrocele having appeared a few days after the return of the bowel, he punctured the swelling, in one case drew off eight, and in the other six, ounces of serum, and in its stead injected three drachms of tincture of iodine with three ounces of water; no inconvenience occurred, and three months after there was no apparent return of the rupture. Thus encouraged, Velpeau employed the iodine injection in a case of inguinal rupture, at the same time carefully compressing the abdominal ring to prevent the fluid passing into the belly. After moving the part about, so as to apply the injection to the whole inside of the sac, it was drawn off by the canula. The results were precisely similar to those of hydrocele so treated. Thus far Velpeau; but in two cases mentioned by Demeaux, which were managed on this plan, there was good proof that the injection had never entered the rupture-sac at all; in the one the patient went on well till the twenty-fifth day when he was attacked with acute rheumatism, which was followed by general dropsy, and he died five or six months after. In the other case numerous abscesses formed in the scrotum, and at the top of the inguinal canal, and the patient was in very great danger; he however recovered, but the rupture was uncured.

5th. The use of the actual cautery appears to have originated with Paul of Ægina, or, at least, he speaks of it as a more modern practice, and more in vogue in his time, than tying the sac; his method of doing which has already been mentioned. He directs that, after marking the part to be destroyed with a triangle, a white hot iron should be applied on its middle, and there kept till the fat is reached, but not deeper, lest the peritoneum should be burnt; onion and salt were then to be rubbed into the eschar, and for some days after such remedies applied as would induce its separation, and thus the cure be effected. The Arabian physicians, according to Avicenna, exposed the peritoneal sac, and, without opening it, cauterised the abdominal ring deeply. Subsequently Franco opened the sac, and, lifting it up with a dilator, cauterised the peritoneum within, as high as he could, with the actual cautery having the testicle as a *pierre de tracque buté*; he then cauterised it well all round, but not so deeply as to destroy the spermatic vessels.

Modifications of the Arabian operations have been employed in modern surgery. Monro primus speaks of caustic having been applied to the skin, "without, as far as he could learn, any rule to know when it had eroded deep enough. If the eschar were too superficial, the design of the operation could not be answered; if the caustic eroded too deeply, the spermatic vessels would be destroyed." And he continues, "I have been assured that after this operation was performed, the testicles of some children, who had undergone it, shrivelled away daily, so that they were effectually castrated." He then says that the object intended may be carried into effect "without any risk, by pinching up the integuments over the ring, and then making a longitudinal incision some inches in length; the middle of which ought to be over the ring, the depth of it such as to bring the spermatic cord into view; then, by the lunar caustic, small quantities of the common caustic, or other escharotics rightly applied, destroy the fatty cellular membranes in the ring, and under the skin; after which hasten a cicatrix by the application of ardent spirits, or of tinctures made with them; and by this endeavour to make the cicatrix adhere to the tendon in the way cicatrices generally do to bones, part of which has cast off where there has been an ulcer of long standing near them. By lying a-bed to prevent the viscera coming out, during the time of the cure, which allows the ring of the muscle to contract, and by the cicatrix, I have seen patients walk afterwards without the bowels falling out, though they wore no bandage. But this cure is not to be depended on, for though the new flesh which sprouts out from cellular substance suppurating, appears at first firm, yet it afterwards becomes as mere cellular tissue as anywhere else. Thirty-five years since Monro's operation was revived by Kein, of Vienna, with the variation of cutting down to the sac on one day, and on the following, applying a paste of one part caustic and two of powdered gum arabic mixed with water, which was repeated three or four times during the course of the cure.

6th. Tying the spermatic cord and hernial sac,

and cutting off both testicle and sac below it, was practised in the middle ages; but Franco proposed his operations for the purpose of doing away with the awkwardness of castration in these cases. As to the removal of the sac, proposed by Lanfranc, and in modern times by Bertrandi, Astley Cooper cut it off, by way of experiment in one instance, but it was not followed by inflammation of the peritoneum, which Velpeau feared.

7th. The operation of blocking up the mouth of the sac with a plug of skin was first proposed by Dzondi, who partially detached a flap of skin, and then, cutting open the abdominal ring, thrust the flap in, and there healed it.

A similar operation was performed by Jameson of Baltimore, on a young woman, who, having previously undergone the operation for a strangulated femoral rupture, had a recurrence of the disease, and was determined to run any risk for its perfect cure. He made an incision through the skin and fatty structure, down to the fascia of the thigh, a little to one side of the centre of the femoral aperture, and a little obliquely upwards, and a second incision beside it, by which he cut loose a lancet-shaped piece of integument, the widest part of which was fully three-fourths of an inch broad, and two inches in length, its largest diameter upwards and downwards, and most of the tongue-like flap below the aperture; the wide end down and cut loose, and the upper end attached to the skin, over Poupart's ligament, by which connexion this flap was to be sustained. The fascia being now cut, and the hernial tumour returned, the thick end of the flap was forced into the femoral aperture. The skin on either side was then drawn over the flesh, and united by three or four sutures. Vomiting and restlessness were troublesome for a day or two, and the outer skin did not heal in its whole extent by the first intention; still it healed in considerable part, and the flap contracted into a hard knot over the aperture; and thus was it closed, so as to prevent the return of the disease, to the best of Jameson's knowledge.

Gerdy plugs the mouth of the rupture-sac by thrusting up a portion of the skin, so that it has a not inapt resemblance to a half-inverted glove-finger. Having returned the contents of the rupture-sac, and the patient lying in the horizontal posture, he puts his finger on the skin at the origin of the scrotum, and pushes it up to the abdominal ring, and even into the inguinal canal, as far as possible, leaving the spermatic cord behind. He then carries along his finger to the top of the intended pouch of skin, a curved needle, fixed in a handle, with an eye near its point, armed with a double thread, thrusts it through the double skin forwards till the eye appears, when one end of the thread is drawn out, and the needle being retracted into the pouch, is a second time thrust through the doubled skin, at the distance of a few lines from the former stitch, and the other end of the thread having been freed from the needle, the latter is withdrawn, and the intruded pouch of skin thus left enclosed in a loop. Each end of the double thread is then separated, and tied upon a piece of quill, so as to form a quill-stitch. Generally one such stitching is sufficient to retain the intruded skin, but sometimes it is necessary to repeat the process on each side of the first-tied portion. The pouch of skin is then to be freely bathed with caustic ammonia, till the scarf-skin has been removed, and upon the external surface a pad, smeared with ointment, is to be confined with slight pressure. This completes the operation.

The application of the ammonia produces smart inflammation and suppuration in the course of three days, and the sore surfaces of the skin touching each other, soon adhere, and in about sixteen or eighteen days have united, and the plug is permanently fixed in its place. Gerdy recommends the removal of the threads on the third day, when the suppuration is established; but it would be preferable, perhaps, to leave them till they begin to ulcerate, after which time they no longer confine the skin. The patient should be kept on his back for at least four weeks after the operation, to allow the perfect recovery of the parts. The plug of skin at first appears externally as a swelling, but gradually subsides, and the cure is perfected.

Gerdy speaks of sixty-two cases treated by his operation, four only of whom died; one from pleurisy, excited, it is presumed, by the cold applications used to check the inflammation of the inguinal region; another from previous organic disease.

I am not aware that this operation has been performed in England, by any one, except Mr. Bransby Cooper, who states that the patient, after his getting up, had a slight return of his rupture.

Signoroni has modified Gerdy's operation, by thrusting up the skin with a female catheter, and fixing it with three long hare-lip pins, four lines apart, and forming on each the twisted suture. This operation he calls *introversion*. Wützer pushes up the skin with a hollow cylinder, which has a plate upon its surface, so that the doubled skin is received between its two portions, as in a pair of broad tongs, and the threads are passed from the inside of the cylinder, through apertures in it, then through the skin and other apertures in the outer plate.

8th.—Another sort of plugging has been employed by Belmas, which consists in the introduction of a tube of goldbeaters'-skin into the rupture-sac; adhesive matter is quickly deposited on it, and is said even to penetrate it, and cause a sort of union, which gradually becomes organised, and forms a solid mass, closing the entrance of the sac. That a quantity of fibrine may be poured out, and that it will become organised, is highly probable, but that dead animal matter should become revivified by union with living matter, is not very easily comprehended; and it is more likely that it is dissolved and discharged in the suppuration, than that it is absorbed, according to Malgaigne's notion.

The operation is performed in the following manner:—The patient having been laid on his back, and the protruding bowel returned, and retained in the belly by pressure on the abdominal ring, the surgeon lifts up the rupture-sac, and slips it about between his fingers, till he feels assured that it is completely empty. He then carefully penetrates the bottom of the sac with a lancet, and, holding the sides of the wound open with hooks, introduces a curved metallic tube into the cavity of the sac, and arranging it cautiously up to the neck, presses its extremity forwards, so as to raise the sac and its coverings at this point. He then grasps the skin, sac, and point of the tube, with the finger and thumb of his left hand, and thus steadies them, while an assistant introduces a pointed curved trocar, longer than the tube, and having screwed on its other end a ring, around which a cylinder of goldbeaters' skin is firmly tied, and of such size as to allow of its free passage through the tube, pushes it through the upper end of the tube, through the sac and its coverings, till its point penetrates through the skin. The operator then lays hold of the protruded point, and retains it, whilst with the right hand he withdraws the tube by the lancet-wound through which it had been passed. After which, the trocar and goldbeaters'-skin cylinder are drawn up till the collar comes through the upper wound. The trocar is then unscrewed from it, and a tube, of two pieces screwed together, one of which has a goldbeaters'-skin cylinder, filled with air, attached to it, and the other a stop-cock and screw, and by this lower piece it screws to the ring already mentioned. The ring and inflation-tubes being then connected, the cock is turned, and the cylinder being gently squeezed, the air is passed from it into the cylinder already in the rupture-sac, which is thereby distended; the cock is then turned, and the upper tube unscrewed and removed. In this way the mouth of the sac is completely blocked up, as the air contained in the cylinder applies it closely to the walls of the sac. After twenty-four hours the cock is to be opened, and with gentle pressure the air gradually assisted to escape, and the enclosed cylinder is presumed to be emptied in from forty to fifty hours. The ring is then to be gently drawn a little out, cut off, and graduated pressure applied and continued for fifteen days, to secure the success of the operation.

Of the several operations just mentioned, I have great doubt which or whether any one is feasible, excepting the most simple—compression; and, indeed, even with reference to it, instances have occurred in which death from inflammation and gangrene has ensued. From the experience of English surgeons of late years, nothing is to be gathered; for surgery, in this country, is little disposed to sport with human life, or to perform new operations, but on rational grounds. Castration, burning or tying the sac, with or without including the spermatic cord, are now merely matters of surgical history, and would scarcely be entertained by any one; and, indeed, in regard to the various kinds of plugging the mouth of the rupture, or pinning the sac together to promote its union, even the French surgeons have considerable doubt of their success. For although Velpeau observes that up to the present time he cannot perceive experience has definitively pronounced against attempting the radical cure of rupture; and that, on the contrary, he is disposed to believe that modern surgeons, justly alarmed by untoward exceptions or inexplicable coincidences, are too much prejudiced to bring their judgment to the consideration of a remedy so important, and which should be submitted to fresh trials before its decided rejection, yet, nevertheless, in passing in review the several operations proposed, there is not one to which he does not oppose reasonable doubts and objections, except scarification of the neck of the sac, to which he would give the preference if he wished to attempt the radical cure of a rupture.

As to Gerdy's operation, which has been considered the most successful, Breschet states that in several instances it was unsuccessful, and Chelius has witnessed a similar result. And Malgaigne observes that it does not obstruct a fourth of the canal, and that it can only transform an external into an interstitial rupture. He concludes his remarks on this subject by saying—On the whole he should even consider it as little prudent to attempt an operation so hazardous, when the same object can be attained by pressure—a measure always innocent, frequently efficacious in children and which in his opinion would be equally so in adults, if properly applied. I have seen, says he, an inguinal rupture cured in a twelvemonth, in an old man of sixty-eight, by complete obliteration of the inguinal canal effected by simple pressure.

Clinical Lectures on Typhus Fever,

By Dr. Corrigan.

Delivered at the Whitworth and Hardwicke Fever Hospitals, Dublin.

Lecture II.

Analysis of Fever (continued); Lesions of Functions of Nutrition, including Assimilation; Secretion and Excretion, signs of; Urine, signs from it; Principles of Treatment.

We shall to-day, Gentlemen, proceed with the consideration of fever, in lecturing upon which I have pursued a method different from that usually adopted.

In dividing fever into lesions of functions, I took up, first, the analysis of the circulating functions, and endeavoured to determine for you the treatment adapted to that particular lesion. Following up the same plan, I shall to day take up the analysis of the function next in order.

I would first direct your attention to the appearances presented in this specimen of urine. On the addition of nitric acid, you perceive an immense number of beautiful crystals begin to form instantaneously; even as I go round with the specimen, you see them rapidly shooting. Keep your attention still fixed upon the fact with which we set out, because from it, as the starting point, almost every observation to be made springs, namely, that the presence of any organic disease is not necessary to the production of fever. Keeping this fact in view, and strictly following up the same principle of analysis, we come now to the consideration of one of the elementary functions of the body—one of still more importance to animal existence than the function of circulation itself—one upon which, in fact, both animal and vegetable vitality mainly depend. I speak of the function of nutrition, in which are included secretion, excretion, and absorption. Suppose that, without going any further in our analysis of fever than we did on the last day,

you were to ask, what, added to a case of typhus fever, such as I then described, consisting mainly of a lesion of circulation, would constitute an aggravation of it? The answer would certainly be—a lesion of the function of nutrition, including, as I have just observed, secretion, excretion, and absorption. But what means have we of determining the existence and extent of that lesion? In all cases of fever possessing at all an aggravated character, there is this particular symptom:—loss of appetite; but there is superadded to this symptom, where the fever becomes aggravated by lesion of the nutritive function, not alone loss of appetite for solid food, but for fluids also. We ask a patient, is he thirsty? and the question is far from being an idle one, for by the answer we determine the amount of lesion under which this primitive function is suffering. The nurse tells you "he is not as thirsty as he was yesterday, he takes no drink unless it is pressed upon him." What does this tell us?—It tells us plainly that the function of assimilation, which is a part of the elementary nutritive function, is in a state of lesion or depression of energy. With this lesion of assimilation we invariably have a dry tongue, a symptom which, in any case of fever, is a matter of consequence, because, conjoined with others, it tells us that the function of secretion is also arrested—the secretion which should naturally take place upon the tongue is absent; the healthy secretion of the mucous membrane generally is absent, as is evidenced by the dry tongue and gums, and the sordes upon the mouth and teeth. We look upon the return of moisture on the tongue as a good sign, because whereas lesion of this function has existed, the moisture tells us there is an approaching return of its activity. A person in typhus fever may die, though the tongue be moist, because he may die without this function being much involved, but where it is involved, the fever is necessarily much aggravated. We examine the urine, because it is an indication to us of the state of the function of excretion, an important component of the great function of nutrition.

In support of these views, I shall contrast the two following cases:—

Donnelly, aged nine, was admitted on the 20th of March, suffering under typhus fever, of which he had been then three days ill, so that the fever is now of sixteen days' standing. It commenced with shivering and pain in the back. The patient lies on his back; sleeps badly; tongue dry and brown; mouth covered with sordes; abdomen soft; skin hot and dry; pulse very quick, up to 152; urine slightly acid, not albuminous, and of the low specific gravity of 1011; when held up to the light it presents a clouded appearance, which latter is caused by the presence in the urine of the epithelium, the cuticular lining of the mucous membrane, the specific gravity is low from the comparative absence of the various salts and urea; 1000 grains of urine at this specific gravity 1011, containing, according to Dr. Christison's tables, only 25 grains, or 1-40th, of solid matter, healthy urine containing nearly double the proportion. These characters of the urine, taken in connexion with the dry tongue and gums, and absence of thirst, together with the sordes, all together establish, as I have said, the existence of a lesion of that primary function nutrition; showing that we have to contend not alone with lesion of the circulating function, such as I described it to you on the last day, but also with that just now described, the whole constituting typhus fever in the severe form.

The next specimen of urine is that of the patient Hodgins, lying in the lower bed at the left hand side of the ward. He lies on his side; he is maculated, too, but his tongue is moist, and, on examining the urine, we find it presenting characters exactly the opposite to that last examined. It has a specific gravity of 1030; 1000 grains of it containing, according to the same tables, 70 grains, or about 1-14th of solid matter, being very nearly three times the quantity contained in Donnelly's urine; there is not the cloud in it which you saw in the last, but it is muddy. To obtain a deposit of nitrate of urea from healthy urine, it is necessary to evaporate it to one half, and let it stand for some hours on a stratum of nitric acid; but, in the specimen first shown, which was a portion of this urine (Hodgins'), you observed that the nitric acid was hardly added when masses of beautiful crystals of nitrate of urea were formed. What do we infer from the characters exhibited in the urine I now show you, that of Hodgins, in which the specific gravity amounts to 1030, and with the muddy deposit which you see at the bottom of the vessel? We infer that the secreting function exists to an unusually active degree. But there is even more solid matter in this urine than that indicated by the specific gravity; for the muddy deposit will (if I am right in supposing it to consist of lithate of ammonia) redissolve on the application of heat [a portion of the urine in a test tube was held over a spirit-lamp so as to heat only the upper half, which rapidly became clear and transparent, while the lower portion, unheated, remained muddy and thick]. It is soluble, you know, at the moderate temperature of the bladder, but deposits soon after the urine cools. You now see the object of placing aside the urine in cases of fever, namely, that you may be able to determine, by the appearances I have described, the state of the secreting function. As long as the urine presents the appearances observed in the case of Donnelly—high coloured, cloudy, and without a deposit—so long—no matter what the other symptoms may be—will your patient be in an unsafe condition; while, on the other hand, if the urine becomes clear on being heated, it is evidence that the function of secretion is resuming its activity, and your patient is, probably, about to get well. The nurse, or other persons about the patient, tell you he is more thirsty than he was yesterday, and they look upon that as a sign of increase in the fever, but I know from frequent observation that it is not; on the contrary, it is a sign which often precedes by some hours the amendment I allude to; in other words it tells you that the function of absorption has again commenced. Again, if you are told there is little or no thirst, you may look out for an aggravation of the disease; this symptom may be classed in the same category as the loss of appetite, &c. The term crisis, as applied to a particular period in the progress of fever, is a word which may properly be applied here, the meaning being just what I have explained to you, that the elementary function has resumed its activity.

You can readily understand with the complete arrest, or deficiency to a great degree, of this function, and without any organic disease whatever, how death may, nevertheless, take place, as neither animal nor vegetable life can continue to last with any degree of activity where this function is much involved. You hear of a "crisis" taking place in fever by urine; the urine tells us of the restoration of the function of secretion or excretion. From a specific gravity of 1010, and containing merely a cloud formed by epithelium, it rises to a specific gravity of 1030, containing three or four times the former quantity of solid matter, and depositing, moreover, a large quantity of lithate of ammonia. This marks a restoration of the function of excretion, and is properly "a crisis." A curious circumstance connected with our present type of fever is its manifesting a decided tendency to remissions; in the morning, for instance, the urine may be loaded with lithates, of a high specific gravity, and contain urea in great amount, while in the after part of the day or evening, the fever again rises, and the urine becomes clouded. It is quite possible for this to happen in the case of Hodgins, who is now only four days ill, his urine containing a deposit, and with a tongue at present moist—symptoms marking activity or restoration to health of the secreting function; yet to morrow or next day the urine may become high coloured and cloudy, manifesting a relapse of the fever. This is an occurrence which frequently happens in inflammatory fever as it is called—a fever in which lesion of the circulating function is marked by a more than usual rapidity in the passage of blood through the capillaries, with a hot skin and high coloured urine, and in which, after three or four days, a deposit takes place, when fever of a different character, marked by clouded urine and maculæ, frequently becomes superadded or supervenes upon the original attack.

Having mentioned these facts, I shall now draw your attention to Hayden's urine (a patient who also came from the workhouse) he lies heavily in bed, and seems seriously ill; the tongue is dry in the centre, with a thin layer of mucus on it, firmly adherent, showing the absence of secretion. The urine presents the slightest possible trace of cloud, but its specific gravity is only 1010, marking the lesion of the secreting function, which, as I said, forms a part of the primary function of nutrition; the lesion of the function of circulation not being severe, in other words, constituting what is called a case of typhus mitior, having a quickened pulse, and some maculæ over the skin; the tongue, dry in the centre, slightly dry gums, and low specific gravity of the urine, mark the lesion of the nutritive function. I shall now try whether it contains urea in the same quantity that Donnelly's urine did; I should say, probably not. You observe, I adopt the same process as in the first case, in which, you remember, the urea began to be deposited before I had time to place the specimen on the mantel-piece. Here there is no appearance of the formation of crystals. Observe still that, after the lapse of some minutes, there is no trace of the formation of nitrate of urea in Hayden's urine; while in that of Donnelly there was almost instantaneously a solid mass of this substance deposited.

We come next to the case of Prunty, whose urine, I find, is of a specific gravity 1020, being not very considerably above that of Hayden; but you observe the gradual rise, from 1010 to 1030, as in Hodgins' case, marking the milder character of the fever. Prunty is now four days ill; his tongue is moist; the pulse, however, is quick. His case is an ordinary case of fever, consisting of a combination of lesions of the two functions, both very far below in intensity what is seen in Haydens' case, in which the specific gravity of the urine, you remember, is only 1010. Prunty's urine, you observe, is cloudy, and I shall now heat the upper portion of the tube, in order to compare the urine at top with that which lies at the bottom of the vessel, but you see it is entirely unaffected by heat. Upon holding it up to the light, you might at first sight confound it with the appearances seen in Hodgin's urine; but the effect of the application of heat to both at once reveals the difference, the one being muddy, the other containing a mere cloud occupying the centre of the fluid, upon which heat produces not the slightest alteration; and during the continuance of which, as I told you a while ago, no matter what the other symptoms may be, your patient is not safe. The specific gravity of the urine in this case being somewhat higher, I should expect it to show traces of urea upon the addition of the acid; but, you observe, it does not deposit with anything like the rapidity that it did in the first specimen.

Here is some of the urine of the patient Walshe, between which and that of Donnelly there appears to be some resemblance; but I think you will see that there is a great difference between them when I have applied the tests. Heat, you observe, does not produce the slightest change, and we shall now add the nitric acid; but first let me direct your attention to the last specimen, Prunty's urine, in which now, at the end of eight minutes, you observe the nitrate of urea begins to form, but very small in amount, and forming, as it were, a connecting link between the case (Hodgins) in which the nitrate of urea formed so rapidly, and some of the other specimens in which it did not form at all. Donnelly, I told you, is sixteen days ill, and that his case is a bad one; the urine of low specific gravity, with a cloud unchanged by heat. The dry tongue and gums are also so many evidences of the inactivity of the nutritive functions. We have, besides, the exceedingly quick pulse, indicating the lesion of the circulating function; we have, in fact, a compound affection of the circulating functions with that of nutrition, the latter being involved to a serious degree. To return to Walshe's urine, you observe, as I stated just now, that on placing it beside that of Donnelly, they both present apparently a clouded appearance, but, to my eyes, the cloud in Walshe's urine is not properly a cloud, but a muddiness, owing to a secretion of the lithates. This I am enabled simply to say because my eye is accustomed to detect these differences; I may be wrong, however, and we shall, as usual, apply the tests. The specific gravity of Walshe's urine is 1015. Being now heated, you observe that the fluid at top becomes perfectly clear, while that in the bottom of the test tube remains muddy.

Now, this patient (Walshe) is fourteen days ill, and to-day does not present what could be called,

with the exception of the urine, a good sign; his tongue is dry on the centre, but slightly moist at the edges; he has a quick pulse, and yet, as I say, hardly one other good symptom, I am led to say that man is recovering. A period of five minutes has now elapsed, and you see there is no trace of the formation of the nitrate of urea.

When the specific gravity of any particular specimen of urine is unusually low, it is very likely you will not find the urea large in quantity; this, however, I do not give as a positive opinion.

In drawing your attention to these facts connected with the urine, I have avoided making any very minute chemical analysis, merely using those tests which in the ordinary routine of practice are easy of application, for in ordinary practice it is quite impossible to follow up any very minute analysis. By merely training the eye, in fact, you may, I think, obtain all you require as regards the characters of the urine. On the last day I directed your attention to the characters presented by that fluid in very severe typhus, when the albumen and colouring matter of the blood pass off with the urine, indicated by the dark colour, by the sediment, and by its coagulation when heated, &c.

To-day we have hardly any evidence of the presence of the salts, the urine generally being of a low specific gravity, with little urea or salts, and with the cloud produced by the presence of the epithelium, furnishing one continuous indication of the lesion of the nutritive function, on the one hand, or, on the other, the commencing recovery of the function is seen in the copious muddy deposit of the lithates, and the excess of urea. The only indication we want is that which is furnished by the presence of the phosphates; but of this we have no specimen to-day, and we might be a long time looking for it. The characters, however, are pretty much as follow:—After the urine has lain by for some hours, we observe a pellicle at the top, as if the urine were frosted; crystals of the triple phosphate form, as it were, a skin or frost at the top, which, if you touch it with the point of a pencil, breaks and falls to the bottom.

Let us see, now, whether we derive any guide to treatment from these considerations, as in the instance of the exhibition of wine in lesion of the circulating function, to which I directed your attention on the last day. The same conflicting statements exist respecting the administration of mercury, as upon the subject of giving wine. In the different papers written upon fever, you at one time see mercury set down as a poison, and in the next paper its efficacy is advocated. For my own part, I have given it with the greatest advantage for the last few years. But what do we give it for? Not for the lesion of the circulating function with sinking. No man would be mad enough to give it in such a case as that with a view of improving the condition of the blood, upon which, on the contrary, in such cases, it would act injuriously. But turn to the symptoms I have stated to-day; look at the cases of Prunty and Hayden. We give it in such cases, because, of all remedies, it is the most powerful as a means of stimulating the elementary function of nutrition. What does it do in cases where lymph is deposited upon serous membranes? Why do we give it in peritonitis and pneumonia? Combined with other remedies, you see its action in promoting a return of secretion and excretion, and for this reason you give it when you have a dry tongue and absence of thirst, when you have urine of a low specific gravity, without salts and without urea; all joined together telling you of the existence of a lesion of this function.

You give mercury in fever, then, not in large doses which might irritate the mucous membrane, and add local disease to the functional lesion. You give it in small doses, on principles as recognised as those upon which you give it in any other disease. You combine it at one time with bark, at another time with solution of acetate of ammonia; or, again, you give it with wine to meet the lesion of the circulating function. In reference to this lesion of the function of secretion, the combination of mercury, in small doses with nitre, is beneficial. The latter is one of those remedies which stimulate the function of excretion by the kidneys, and hence, we use it in combination with the mercury; while to one or both, we add bark, either to combat the type or to meet the remission of our typhus fever. And now we have an explanation in the two lectures we have gone through, of our reasons for using, in typhus fever, the combination of wine to raise the sinking of the circulating system; blisters to stimulate the capillaries, mercury to promote the return of the function of secretion, nitre to stimulate the function of excretion, and bark to meet the type of the fever and its remission. We have yet to consider the lesions of the nervous system.

ORIGINAL CONTRIBUTIONS.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.
Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

FIBROUS TUMOUR.

Although I am aware that I am very far from having exhausted the subject of my last report—viz, a description of the fibrous tumour of the uterus under the various forms, &c., in which it appears—I will proceed to give some illustrations of it by cases, as these will lead to further remarks, and thus, I hope, render those which I have already given more complete.

Mrs. A., aged forty-one, never pregnant.

January 20, 1841.—Has a large, solid, and insensible tumour springing from the pelvis, and rising into the abdominal cavity. Upon vaginal examination, it is felt filling up the pelvic cavity, just like the full-grown fœtal head, with ridges like those of sutures, but it is much harder and more immovable; the os uteri has entirely disappeared, the cervix and lower portion of the uterus being lost in the general mass of solid structure.

She has occasionally much difficulty in passing water, and is unable to go long without relieving the bladder; she has sometimes numbness of the left thigh; states that the catamenia and the bowels are regular, but complains a good deal of flatulence and distension.

Applicent. hirudines vj. tumori per vaginam quâque hebdom.

February 1 (by note). Leeches have been applied twice with relief.

22. Has had the leeches applied four times since last report; the last time they bled very freely, she thinks as much as a teacupful; besides which, she passed a coagulum nearly as large; does not want to relieve the bladder so frequently, and passes water more easily. She has lost the sensation of numbness of the left thigh.

March 13 (by note). Has applied leeches twice since the last report, the first time they bled a good deal, and made her feel languid; the second time less so; states that she feels sure the mass is smaller; has not mentioned her general health; let her do so, and continue to apply the leeches.

16. Writes that her health was never better; fancies that the tumour is larger in the morning; says that it never diminishes in hardness, but that it appears to be more movable.

Cont. hirudines.

April 10. The tumour seems to have remained quite stationary, both in size and hardness; during the four months preceding January, it had increased very quickly, but since then, if anything, it has somewhat diminished. Shortly after this she discontinued her visits.

The only point of interest in this short and cursorily drawn-up case is, the effect produced by the local abstraction of blood. There were evidences of considerable pressure exerted by the tumour in the pelvic cavity, as shown by the difficulty both in retaining and passing water, and by the numbness in the thigh; all these were very considerably diminished, and the relief was in proportion to the quantity of blood lost. The general health improved; and, from the greater mobility of the tumour, it may be supposed that its size had in reality somewhat diminished. Whilst these morbid growths continue vascular to any extent they do not attain their full degree of hardness and solidity; at least, this has seemed so to me, for, in some cases, a slight, but general, diminution of size has followed the action of local bleeding, but the mass has become much harder, and has now continued stationary, not increasing any further in point of bulk. This result of local bleeding is chiefly seen when fibrous tumour has already attained a considerable size and bulk, and is also of some standing; at an earlier period its structure is not absolutely hard, but elastic, yielding more or less upon pressure; it is composed of fibrous (or sub-cartilaginous) vascular and cellular tissues, not closely, but somewhat loosely, connected together, and evidently capable of considerable alterations of size, and probably structure, dependent on increased or diminished vascular activity and absorption.

Mrs. S., aged twenty-six, fair, married three years, never pregnant.

December 18, 1844. Complains of severe and continued pain of pelvis, and over the symphisis pubis, with darting pain in the hips and groins, and aching down the thighs; suffers pain on sitting down suddenly. Hemorrhoidal congestion; much irritability of the bladder, especially at night; is unable to hold her water long, but has no difficulty in passing it. The fæces are flattened and enveloped in mucus. The catamenia appear every five weeks, but in other respects they are natural.

Has been in delicate health for years, and always more or less subject to hemorrhage, and aching of the loins. She began to have the above pains severely about six months ago, when they were so bad as to prevent her walking.

Examination per vaginam.—Uterus forming a hard, solid, nodulated mass, which seems fixed; it is tender, highly congested, and throbbing in all directions; the cervix is soft, os closed, with a soft pulpy feel inside; behind the cervix is one nodule larger than the rest.

Examination per rectum.—The whole mass of the uterus is very tender; she attributes the pain and tenderness to copious injections with cold water which she used some time ago per vaginam.

Hirudines viij. ori uteri. ℞. Ext. taraxaci cochl., min. ½, om. nocte. ex lacte. ℞. Acid. hydrochlor. dil., Acidi nitrici dil., āā ʒij; Syrupi aurantii, ℥j; Aquæ cinnamoni, ℥iss; Misce ft. mist. cujus sumat cochl. min. j. ter die ex aquâ. ℞. Sodæ potassio-tart., ʒij; O. m. ex aquâ.

28. Leeches bled tolerably, with much relief; less pain of pelvis.

Rep. med. and hirud. ℞. Quinæ disulph., gr. ij; Ext. lupuli, gr. vj; M. ft. pil. ij., om. nocte sumendæ.

January 4, 1812. Leeches were applied on the 30th, and five bled well, with much relief; feels better in all her local symptoms; can retain her water better; has less pain above the symphysis pubis; six weeks have passed since the last appearance of the catamenia.

Exam. per Vaginam.—Os and cervix uteri *much* less painful than before; anterior portion of the uterus is smaller, softer, and less tender; but behind it a hard tumour may be felt like the fundus uteri when retroflected; it is so intensely painful to the touch that I cannot introduce the uterine sound.

Pergant Hirudines and medic.

11. Only two leeches took, but these bled well, and with much relief; feels weak, but better in all her local symptoms. Omitt. medicam. Rep. hirud.

℞. Ferri sulph., gr. ij; Extr. lupuli, gr. vj. Misce ft. pil. ij o. n. s.

℞. Acid. hydrochlor. dil., Acidi nitrici dil., āā ♏. vij; Tinct. lupuli, ♏. xx; Syrupi aurant., ʒ ss; Infus. Gentianæ co., ℥iss. Misce ft. haust. ter die sumend.

℞. Sulph. precip., Magnes. carb., āā cochl. min, o. m. ex aquâ.

February 1. Has used leeches to the os uteri several times with much relief; all her local symptoms are much diminished; general health much improved.

Exam. per Vaginam.—Less swelling and tenderness; one very large vessel is felt pulsating on the right and anterior portion of the inferior segment of the uterus. The swelling behind the cervix, before alluded to, is still painful; towards the left and posterior part of the uterus there seem to be one or two hard nodules. Pergat.

25. Has continued the medicines and leeches.

Exam. per Vaginam.—The mass is smaller and

less tender; the uterine sound passed up beyond the ordinary extent; the upper part of the uterine cavity is intensely painful when touched by the sound; pressure on the abdomen distinctly moves the sound. Pergat.

October 14. Has continued to improve; the leeches have been applied occasionally, and always with relief.

Exam. per Vaginam.—Tumour very considerably diminished, softer and scarcely at all tender. Uterine sound passed easily, but I do not think that it went so far as before; the fundus is still intensely painful when touched by it.

This appears to have been a case of fibrous tumour of the uterus, involving chiefly its posterior wall, and bulging down considerably behind, and also elongating its cavity.

When I first saw her, the symptoms indicated the existence of severe pressure in the pelvis, and a highly congested state of its circulation. The tumour presented that tense half elastic feel which gave one the idea that the finger could make some impression upon it, if its extreme tenderness would have admitted of the necessary pressure. Although its bulk and solidity were very considerable, still it did not appear to have attained that degree of hardness which is met with where the mass has been of long standing, and this circumstance, together with the strong evidences of vascular congestion, in my mind fully indicated the frequent application of leeches. Immediate relief was produced; the sufferings arising from the pressure of the mass in the cavity of the pelvis began to abate; the health improved; the portion of the tumour to be felt per vaginam became softer and less painful.

As the frequent repetition of the leeches began to affect her strength, and make her feel languid, I put her upon a course of mild tonics, with good results; her general health and strength improved, and she now bore the local bleedings with perfect impunity. In this way she continued to progress until last October, when the difference in the condition of the disease had become very striking.

I have called on my patient occasionally since the last report, and am happy to find her enjoying excellent health, and feeling, as she expresses it, "quite well."

It would be an interesting question to ascertain what is the precise condition of the tumour now that it has been so reduced in size, hardness, and vascularity. May we not fairly presume that those portions of it which are of longest standing, and which are most solid in point of structure, will now have become still more compact and hard, while they have diminished in size, whereas the other and more recent portions, whose structure is softer, will probably have diminished to a still greater degree, while they have become softer and less vascular, and that even the softest portions of them may have disappeared entirely.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE CASES.

FIRST SERIES.

Reported by J. S. FLETCHER, Esq., Student at the Manchester Royal Infirmary.

SURGICAL CASES.

CASE V.

Dislocation, with Partial Fracture of the Fourth Cervical Vertebra—Paralysis and Death.

John Jenkins, aged thirty-nine, a carter from Collyhurst, was admitted into the hospital on the 27th of January, 1845, at eleven, a.m., under the care of Mr. Ainsworth. He is a stout, robust man; his habits and mode of life have not been good, and he has been a heavy drinker. About half an hour previous to his admission he fell down a hole in a warehouse, about four feet deep, and whilst falling he caught the back of his neck immediately above the scapula, against the side of a projection, which gave him a very severe blow. At the time the accident occurred he was under the influence of liquor. He says he felt slightly sick and faint, could not move his legs or arms, and was quite unable to assist himself when he was carried to the hospital.

When admitted he had not the slightest power of moving his extremities, which lay perfectly motionless, and totally insensible to all external impressions; he was unable to turn himself in bed; he had lost all sensation in all the points below the nipple—above that point he had normal feeling, except in the arms; the right arm he had not the least power over, nor had he any sensation in it; over the left he had much more command—he could extend and flex it, but could not flex the fingers to grasp any object; he had some sensation in the arm, but not the normal amount; he was unable to pass his urine; a small quantity dribbled away immediately after the accident, but he did not feel it passing; he had no command over the sphincter ani, some fæces passed involuntarily; his respiration was very laboured, and almost entirely diaphragmatic, the ribs and intercostal spaces not moving; he was perfectly rational; pulse slow, soft and weak; surface warm; face rather flushed; countenance anxious. He had no pain in the head, but complained of a fixed and severe pain at the back of the neck, over the lower part of the cervical region, this was much increased by pressure; there was no trace of any displacement or abnormal appearance in any part of the spine.

Vespere: Symptoms same as when admitted, except that pulse is more full; catheter has been passed, and drew off a quantity of high coloured urine.

28. Had a tolerable night; slept well at intervals; complains of no pain except in the neck, which is still severe and increased by pressure; paralysis remains the same; sensation is rather more distinct a little below the nipples, but there is complete anesthesia over the other parts; he has neither sensation nor motion in the right arm; in the left it is the same; the respiration is not quite so laboured; he has not passed any urine since the catheter was passed, nor has he passed any fæces; pulse is smaller and feeble, 108; skin warm and dry; has considerable thirst and anorexia.

Vespere: Has had catheter passed; it drew away a large quantity of urine; dyspnœa more urgent; other symptoms the same.

29. Has had a very restless night; the dyspnœa has been very urgent; he breathes entirely by his diaphragm; lied upon his left side, with his head thrown back to assist in breathing; countenance is sallow and dusky from circulation of non-arterialised blood; paralysis and anesthesia remain exactly the same; the left arm he can move, and has distinct sensation in the whole of it; pulse is 109, small, and feeble; surface is warm and moist; tongue dry, parched, and furred; has great thirst, but is afraid to drink in consequence of the difficulty it causes in respiration; urine drawn off by catheter; has not passed any fæces. He still complains of fixed pain in the neck; is free from pain in the head, and is perfectly sensible. He continued to get worse, and became heavy and comatose, anesthesia and paralysis remaining, and died at four, p.m.

POST-MORTEM THIRTY HOURS AFTER DEATH.

The vertebra of the neck, extending from the third cervical to the first dorsal, were removed entirely. Upon examining them there was found to be a separation of the fourth from the fifth cervical; the fourth seemed to have been torn from its connexion with the intervertebral substance, which was torn partly through. The anterior ligaments connecting these two vertebræ were torn completely across.

The right inferior articular process of the fourth vertebra was fractured, and separated with a portion of the pedicle or lateral mass entirely from the body of its vertebra, except through the medium of the soft parts, and allowed of motion in any direction. The capsular ligaments connecting the articular processes of the fourth and fifth cervical vertebræ on the right side were entirely destroyed, being so ruptured that these two processes were not at all connected to each other, and allowed of motion in any direction. The capsular ligaments connecting the same points on the left side were also somewhat injured, but not so much so as to allow the two processes to separate. The body of the fourth vertebra seemed displaced backwards on the right side, which easily took place in consequence of its ligamentous connection being destroyed.

No other parts were examined.

REMARKS.

Fractures of the cervical vertebræ are somewhat rare, but a dislocation of these parts is still more rare—in fact, I believe there is not upon record more than one case of dislocation from accident, without some fracture having occurred at the same time. At the time this man was admitted he had all the symptoms indicating severe injury of the spinal cord very high up, but below the fourth cervical; for had it been above this, death would have been immediate from paralysis of the diaphragm, in consequence of injury above the origin of the phrenic nerve. It was evident, however, from the way in which respiration was carried on, and from the extent of the paralysis and anesthesia, that the injury was immediately below that point; but what might be the nature of the injury was somewhat uncertain, as there were no traces of displacement of any of the cervical spines, nor any crepitus; had these symptoms been present, it would at once have been clear that there was fracture, but in their absence all the other symptoms might possibly arise from a severe concussion of the spinal cord, which is less fatal than cases of fracture. The cause of the partial paralysis of the left arm, while the right was totally paralysed, was obscure previous to death, but was readily explained by the fracture on the right side, whilst, on the left, there was less displacement, and, in consequence, the upper branches of the brachial plexus of nerves escaped injury.

The displacement of the body of the vertebra without its being fractured, and the manner in which the intervertebral substance was torn through and separated from the body of the fourth vertebra, point out this as a case of dislocation; the fracture of the right articular process having occurred as a consequence of this, the bones, rather than the ligamentous structure, having given way in the displacement. The displaced vertebra was causing much pressure upon the chord; and hence we had the different symptoms present when he was admitted.

In the treatment of these cases, all the endeavours of surgeons have so far proved useless. Various plans of treating fractured spine have been suggested, such as trephining to remove the spine and arch of the vertebra; but these attempts have so far failed, and, in dislocation of the vertebræ, which it is impossible to diagnose from fracture during the patient's life, violent extension and counter-extension of the body of the patient, and placing the patient with his back across a barrel, &c., have been recommended and tried, without the least encouragement towards success. All that can be done is, to guard against sloughing, and to treat any symptoms that may arise, taking care fully to empty the bladder, so as to obviate as far as possible that ammoniacal condition of the urine which generally comes on, if the patient live long enough, and causes much disease of the bladder. At the same time that we adopt these palliative means, we must hope that nature may, in some way, repair the injury, or the cord accommodate itself to the pressure of the displaced bone, as it occasionally has done in spontaneous dislocation from disease. In injuries to the cervical vertebræ, however, there is no time for this, as they are generally fatal within a few days, as in this case; but when it occurs lower down there is more time, as they live longer; I have myself seen one case where there was evident displacement in the lower part of the dorsal region, where the patient left the hospital at the end of about four months, and had at that time more sensation in the lower extremities than when admitted.

HOSPITAL STAFF.—Deputy Inspector-General of hospitals, John Robertson, M.D., to be inspector-general of hospitals, with local rank, vice Henry Franklin, whose promotion has been cancelled. Assistant-surgeon Thomas Joliffe Tufnell, from the 3rd Dragoon Guards, to be assistant-surgeon to the Forces, vice Martin, appointed to the 87th Foot. Richard Woodley, M.B., to be assistant-surgeon to the Forces, vice Pilleau, promoted in the 70th Foot.

REVIEWS.

Abstract of Researches on Magnetism, and on certain allied subjects, including a supposed New Imponderable. By BARON VON REICHENBACK. Translated and Abridged from the German by WILLIAM GREGORY, M.D., Professor of Chemistry. London: Taylor and Walton. 8vo. pp. 112, 1846.

This is a production of no common character and consequence. It comes with all the pretensions of scientific accuracy and precision, and commends itself to one's confidence, from the unquestioned intelligence and integrity both of the author and translator. They are men of ample learning and experience, patient in the search after truth, and fearless and faithful in the expression of it. Habits of analytical investigation, and of philosophical induction, in which they have been severely schooled, render it unlikely that they would commit themselves to the freaks of visionaries, or be negligent of the orthodox means by which alone realities can be arrived at. At the hands of such men, therefore, we are prepared to receive, with every deference, announcements of discovery which might perhaps strain the credulity of others, either not acquainted with the honesty of the sources, or glad of availing themselves of the opportunity of assuming an air of philosophy by affecting one of scepticism. Of the latter class there are unhappily too many, but there is some consolation in the hope that, if they have not head enough to reach the truth themselves, they may at least have heart enough to acknowledge its value after having been introduced to its acquaintance. We submit these observations to the service of those who have hitherto assumed Mesmerism, *toto cœlo*, to be a fiction, and its advocates the victims of delinquency or delusion. No startling fact was ever ushered into the world without meeting with one adventurer or another who was impertinent enough, *sans ceremonie*, to doubt it. And it has almost invariably happened that those who have been most officious in the expression of unbelief, have been the least competent to form correct opinions of their own, or to appreciate or apply the opinions of others. In most instances the current of prejudice has been permitted to set in before dispassionate inquiry furnished any authority for inference. The scepticism of all ages, and upon all subjects, has almost invariably had for its votaries the weak-minded or the wicked These are they who have either not the means of arriving at the truth, or have no anxiety for the attainment of it. They mistake ridicule for reason, and are indifferent whether their statements be those of fancy or of fact. We have watched the manœuvres of many an opponent of Mesmerism, and have found him to be precisely what we have just said. We have never defended Mesmerism in the large—nay, extravagant—acceptation in which it has been of late introduced to the world by "experimenters," in whom the profession could properly repose no faith. But whilst, on the one hand, we have reprobated the absurdities committed by charlatans and idle adventurers, who would fain make this, as they would make others of the auxiliary sciences of medicine, subservient to unworthy purposes, we have ever supported and defended against the "mock-marvel" empirics of the equally contemptible school, those principles of the legitimate science of animal magnetism which called for defence and deference. It has been our amusement to witness the mental evolutions of many a philosophical quack attired in the cast-off habiliments of the gladiators of old, who were beaten out of the arena of disputation, and to see him use the rusty, wormy old weapons of yore, against the Mesmerism of to-day, as though the lance and target, and other such trumpery, were really his own, and not second hand affairs, stolen on the sly; and it has equally been our amusement to watch such circumgyrations in a field far too good for him, and hear the dirty eclat with which he hailed himself a victor! The Quixotism tickled us amazingly, but as it was not at that time important enough to level an honourable lance at, at this time it deserves no better rebuke than that which we now offer with laughter on our lips.

The pamphlet before us is one which will be received as of great value to scientific men generally, from the importance, novelty, and probable truth of the facts which it enunciates, and to the advocates of animal magnetism in particular, for the important bearings which it has upon their particular science.

"The author has demonstrated that magnets act on the human body, especially in certain conditions, and thus restores to the statements of the early magnetisers on this point the credit of which they had been unjustly deprived. The author's experiments are the more valuable, because, as far as the present memoir extends, he never experimented with persons in what is called the mesmeric state."

"But he goes farther, for he demonstrates the existence, in *magnets*, of two forces, one which attracts iron and affects the needle, and one which acts on the nervous system, and which he has found, *unmixed*, in crystals. This new force he is disposed to view as the true agent in animal magnetism. At all events it is so in the magnet, when it acts on the system."

"This new power is transferable from one body to another, and is conductible through matter. A body may be for a time charged with it, and this is the true explanation of the fact now demonstrated by the author, that a glass of water, as stated by Mesmer and his followers, may be magnetised by contact with a magnet, although that term is improper." (Gregory's Preface, pp. v—vi.)

Dr. Gregory very judiciously says, in anticipation of the petty objections raised by those who have only idle laughter and scorn to supply the place of reason and sober reflection who would play the bully and the braggart when science fails to serve them—who would meet scholars and gentlemen with weapons such as these never deigned to use, and would not degrade themselves by contending against—

"It is easy to object to these researches, that they have been made with persons in a morbid state, and are therefore unworthy of confidence. This is a very convenient way of getting rid of facts, far more so than that of disproving them by researches as laborious and conscientious as those of the author. But it is not a scientific method, and is, therefore, unsatisfactory." (pp. vii—viii.)

The work throughout consists of numerous and carefully-conducted experiments concerning terrestrial and animal electricity, or rather, perhaps, concerning inorganic and organic electricity, both terms being used in their widest acceptation. These experiments are so ample, and of necessity so connected, that, to enter into an analysis, or even to give a summary of them, would be inconsistent with the space we have to devote to their notice. We must, therefore, entreat the attention of the profession, and of the scientific public, to the pamphlet as it is issued to us from the hands of Dr. Gregory. It is full of most important facts, derived from careful, impartial, and continued observation, and though these facts were not elicited with any preconceived intention of advantaging the science of animal magnetism, yet do they most singularly bear in its favour, and defend it from the ridicule of those vapid opponents who would affect to laugh it out of countenance. We apprehend that these "exposers" of its "absurdity" will find some difficulty in handling to its discomfiture the weapons which Dr. Reichenbach has given them to wield, or in persuading the sober part of the profession to believe any of the mountebank grimace and jargon which themselves may choose to employ in its favour. The pamphlet before us suggests to us the idea that animal magnetism, divested of the extravagance with which impostors have invested it, is in a fair way of having its claims placed on a just and substantial ground—that only ground on which in reality any system can stand with prospects commanding and constant—that of scientific induction from well digested, well substantiated, incontrovertible premises. We cordially commend the pamphlet to the notice of our readers.

The school of medicine at Galata-Serai is making great progress. Lectures on pharmacy and on midwifery (the latter for midwives) are delivered, and autopsies are practised more frequently than formerly. A pathological cabinet, prepared by Dr. Thibert, has also been purchased.

TO CORRESPONDENTS.

A Three Years' Student and a Constant Reader *will find full information on the subject he inquires about in our last Students' Number.*

Junior *is certainly liable under the Apothecaries' Act whilst practising without their qualification. Whether the Company would exercise their right in such a case seems, however, improbable.*

S. H.—*Our next number will contain the report of the meeting of the Medical and Chirurgical Society, at which Mr. Liston brought forward the unfortunate case of Mr. Seton.*

M. B., a Former Student of University College. —*It would be hardly fair for us to give the name of a person forwarding information, to a correspondent who conceals his own, and even under other circumstances we are not in the habit of betraying confidence reposed in us. Our correspondent may rest assured, however, of the exactitude of our statement.*

Beta *can answer his own question by consulting* Walker's Dictionary.

Mr. Wilton's *memorial is proper matter for an advertisement. We should be glad to see others follow the example of the Gloucestershire Medical and Surgical Association, in memorialising the Government against the College of Surgeons—but we cannot promise to print the documents.*

Dr. Sheehan, of Fern Hospital, *disputes the opinion of a correspondent of ours, that fever hospitals increase the mortality of fever. By the report of the Poor Law Commissioners on Irish Charity, the deaths in Fevers Hospital in 1840 were only about 6 per cent: and the removal is argued to have been likely to have stayed such contagion, and also not to have increased the mortality of those attacked. The latter inference is further supported by the wretchedness of Irish dwellings. The advantages of regular attendance, ready supply of food and medicine are also dilated on by our correspondent.*

Medicus.—*The meeting of the Association is held at six this evening (Friday).*

A Student.—*The apprenticeship is indispensable.*

M. H. *is welcome to try.*

We have to thank numerous correspondents for letters on various interesting topics. Our columns are so pre-engaged that we can make no pledge of early insertion.

A Surgeon.—*The Council are again said to have stopped short in their thoughts of a new charter. At any rate, nothing effective is being done.*

THE MEDICAL TIMES.

SATURDAY, APRIL 18, 1846.

There is no greater lesson of wisdom than to know when we are well served.—DRYDEN.

THE meeting of the members of the National Association, to be held this evening (Friday, is of inexpressible import. Our hopes of an improvement in medicine are largely centred in it. We have nothing else to look to. The Government stands—self-confessed—incapable; the corporations are effete; the Profession shows no sign of movement, save through this Association. The meeting of this evening is then pretty well our all. It holds the casting vote of our fortunes, and is the arbiter of professional destiny for years. It will specifically adjudge whether our vessel shall drift rudderless, as of aforetime at the mercy of every wind of injustice and every current of intrigue, or whether—refitted, and under respectable pilotage—it shall make direct to the noble harbour of an honourable science to which all good men's wishes have so long pointed.

We rejoice to think that, if the Association be thus our sole hope, it is, at the same time, a magnificent hope. For twenty-five years we have had nothing like it. There is in it a power from numbers—an influence from character—a force from

union—all unprecedented as great. There is in it a commenced organisation which, if manipulated with due skill and courage, must collect about it the intelligence and energies of the whole Profession—materials whence may be built up that fabric of medical government, alike called for by the character of the age, and the needs of science. Two easy conditions fulfilled—the Profession true to the Association, and the Association true to itself—there is no limit to our triumph, save complete success.

Now, why is it that, amid the corrupt incapacity of our corporations, and the indifference of Government, and the immobility of a part of the Profession, we have this pleasing prospect of action, order, and improvement? The answer is not flattering, nor is it likely to be grateful to many of our readers—the mass of the Profession. It infers no great things done on *their* part; and men who perform not their own duty, do not like to be told of their obligations to those that do. Beyond, then, what has been done by the press, the chief merit of all lies with the sixty or eighty gentlemen who, consenting to form the working committee of the Association, have given time, money, and deliberation to push forward the good work. To them and their incessant labours we owe this great organisation. Without their honourable abandonment of hours of privacy and repose in response to the calls of public duty, we should now not only be without improvement in medical affairs, but without the hope of it. Whatever is good in our present position—whatever hopeful—whatever *not worse*—we owe to them, and if they fail to carry out their views, or are compelled to abandon the work they have set their hands to, we shall despair of the "republic." For, if they, pursuing their old course of deliberative, but active, wisdom, are defeated—if they, honest in design, as respectable in numbers and personal position, fail—what possible combination, more immaculate and less objectionable, can we look forward to as likely to initiate, or bring to success, a new movement? The vessel of medical reform, if not brought to harbour by them, must founder. They are not only the best, but actually the only pilots that can take charge of her.

The obvious policy, therefore, of those that hate a settlement of medical differences is to bring into suspicion and disparagement this respectable committee. Defeat them, and medical reform is retarded, and made a miserable bone of peculating contention for another quarter of a century. There never was such a union for good before—this ended, there never will be again. The true policy of the enemy, therefore, is to introduce defeat by dissension. Defeat now is a defeat total for years.

That the attempt will be made at the meeting, or rather renewed, we cannot doubt. There never was a cause without unscrupulous, unprincipled, and characterless *attachés*, ever ready to retort the antagonism of vulgar cunning for the repudiation of indignant respectability. There never also was a cause without some followers who, from wounded vanity or weak powers of reasoning, were accessible to seduction. These are contingencies that befall every great movement, but they are of import only when the movement is under weak direction, or depends on unworthy supporters. The low impostor may lay snares—the simple dupe may unwittingly help to spread them—but with a perspicacious public, with stirring men at their head, detection is sure, and indignant reprobation inevitable. But we must not speak too confidently. The interests identified with the present movement are great, it is true, and the Profession would suffer by the defeat more than can be hastily described. But we are a body—at least so it is said—incapable of permanent union—full of natural distrusts and jealousies—and ever ready to break to pieces on the first assault of any unprincipled "*manœuvrer*." The general opinion is that respectable men may work to advance our interests without securing better return than a doubt as to their motives; and that with the most obvious advantages before us we would withdraw from the best organisation on any objection trumped up by a malicious ingenuity. We are affirmed, in short, to be unworthy of that medical government we ask for—that giving ourselves up to a low system of public ethics, we have neither the public virtue to make sacrifices for the good cause ourselves, nor the fairness to appreciate with gratitude the sacrifices of those that do.

Intrinsically we believe these imputations to be libels on the fair fame of the Profession, but outwardly, and by practical demonstration, it must be owned, they are not rebutted with the vigour and decision that might have been expected. We have seen this respectable committee in the midst of the most harassing and responsible exertions for us made for months the subject of coarse and (we speak advisedly) brutal vituperation; and great as has been the disgust expressed individually in consequence, we are yet not aware that the Profession, as a body, has made such a demonstration of its feelings as the occasion fairly demanded. If public men have duties, they have also rights, and among the first of them surely is it, that those for whom they labour, should not suffer the efficiency of their exertions to be interfered with, and tamely sit by while they are subjected to all kinds of outrages as wanton as they are gross. Gratitude

> ——— is the spur that the clear spirit doth raise
> To scorn delights and live laborious days.

And it is not very pleasing to the purest minds after their toils and anxieties

> ——— The fair guerdon when they hope to find
> And think to burst into a sudden blaze

to find that they are made the subjects of an unrepelled vituperation, and in place of an ardent support meet with but a lukewarm indifferency. It is not in this way that our interests can be advanced. The only result is to throw public affairs into the hands of unprincipled persons, without character or station, who will turn them into matter of merchandise.

> Seria cum possim, quod delectantia malim
> Scribere, tu causa es, lector —MARTIAL.

A FEW more words upon the quackery of the ancients, and its imitation in more recent times.

Somewhere about the close of the thirteenth century lived Cophon, who wrote a book on purgatives. The work possessed no inconsiderable merits, but it gained him more reputation than recompense, and finding that, to please the public, and get well paid for it, he must strike upon some singularity, he essayed the adventure, and it answered admirably. He advertised a sort of aperient diet, obtained by feeding a pullet for eight days on white hellebore, and then killing it and making it into soup. The soup which he vended, though of course not prepared as he affirmed, acted as a gentle purgative, and was eagerly sought after by two very large classes of persons—those who are caught by novelty, and those who want coaxing, like children, with physic made palatable. Cophon made both fame and fortune by his ingenious device. Since his time, his practice has had multitudes of followers. Within our own recollection, "medicated mutton," peculiarly fitted for dyspeptics and consumptives, has been puffed into popularity; and *a-la-mode beef*, with a novelty of seasoning, has been vaunted as a *sine quâ non* for keeping the bowels open; whilst cathartic, lithontriptic, and stomachic soups, have been as common, and about as valuable, as continental degrees. The absurdity, however, has for the most part passed away, and left the refuse of its reputation chiefly in charge of jalap-gingerbread, and aperitive "home-baked," fermented without barm.

Something of the same school was John of Gaddesden, who was the founder of a fashion, which has never been extinct since his day, and which will most likely continue to live as long as physic may be called for. We mean the practice of never dealing in unpalatables, either of opinion or of prescription. John's phraseology was "linked sweetness long drawn out"—no matter what the disease, or how near the patient to death, John was all consolation and honeyed comfort—he talked pain out of its very existence—persuaded hypochondriacs that they were as happy as angels, and was often on the verge of cheating death of a victim, by suggesting to the poor sufferer that he was getting well fast. His physic, like his phraseology, was as agreeable as it could be, and great was the success his *placebos* met with, which were of course administered under the self-satisfying conviction that, if they did no good, they were not likely to do any harm. It is not necessary that we should pause to count over the names of the many fashionable physicians who, since John's time, have followed his example and been fed as amply.

Another, John Arden we mean, who lived about the beginning of the fourteenth century, got into immense popularity and practice by inventing an enema syringe. Before his time the custom of giving injections was not common, and the *modus operandi* thereof was very bungling. These things he remedied by the introduction of a simple instrumental contrivance, which served him so well, both at home and abroad, that he said of it, "centies pecuniam et famam in locis maxime distantibus acquisivi." Of course he made his machinery marketable by persuading the people that they were suffering from the particular ailments for which his contrivance was intended. Nothing is more easy than to make a man feel ill by telling him he looks so. This was the unavoidable weakness of one's nature that John Arden fastened on—he affirmed certain diseases to be much commoner than had hitherto been supposed, and he described their symptoms with such fidelity and minuteness, that to fail of fancying you had got some of them, was next to impossible. Forthwith piles, fistula, constipation, and stricture of the rectum, started into fashion, and came, as a matter of consequence, within the magic circle of John's healing pretensions. He caused diseases, and he cured them, and much were the people indebted to him for the skill and scrutiny he exercised in their service. A comet, like a Cape sheep, is generally thought important in proportion to the length of its tail. Regarding John in the light of either of the natural curiosities in question, he was quite a wonder in his way, for he has had as many followers as would rival the retinue of Mahomet. Mercy on us! what ailments of the nether bowel have been called into existence, and conjured out again, in our own day, by an *instrumentality* like that employed by John Arden! What fortunes, aye, and what fools, too, have been made by syringes, suppositories, rectum bougies, and other such ware! But whatever notoriety may belong to them, it is curious to find that they have no claim to novelty. Our forefathers were no wiser than we are.

Bovius was an old medicine-monger in the sixteenth century, who discovered in a "concen-

trated preparation of gold," as he called it, a cure for syphilis. He was believed, of course, and he vaunted and vended his remedy, until he found himself sufficiently enriched to do without troubling the credulity of the public any longer. Bovius had had predecessors in his particular line, but their adroitness did not equal his own, and we are inclined to regard him as the illustrious head of that horde of impostors, who, in his *specific* department, have contrived to offend the moral decency, and pick the pockets, of mankind, with impunity, from his age to the present. Would that dupes of this execrable fraud were to be found no longer! Would that our youth, to whom the artifices of these adventurers are addressed, would learn to read in their very trickery the evidence of their imposture!

Stulte, quid o frustra votis puerilibus optas,
Quæ non ulla tulit, fertque feretque dies?

Botallus, who lived in the sixteenth century, failed for a long time to get into practice, notwithstanding all his learning and professional skill, which he possessed in great abundance, so he bethought himself to start the novel scheme of large bleeding. He accordingly announced that the plan of treating disease otherwise than as he suggested was good for nothing, and that if people wanted to get rid of their ailments in right earnest, and quickly, they must be phlebotomised on a large scale. This doctrine he proceeded to carry out to very decided lengths, and so gained the credit of being "a kill or cure man." This soon established his popularity—he became as seductive as a syren—and though he now and then bled a poor devil to death, the people did not mind it a straw, but continued to praise and pay him for the jeopardy he put their lives in. The *circulating medium* fell into greater disgrace than ever did the paper currency of this country—blood got to a discount, and nobody would be bothered with it—solidism was all the rage, and to such an extent did the mania spread throughout France and Spain, that, had it not been finally laughed out of credit by the Sangrado of Gil Blas, the population would have stood a fair chance of becoming exterminated. A few years back, the prejudices of Armstrong in favour of bleeding, enforced as they were by his eloquence, operated so potentially upon his pupils, that there was something more than a probability of the old absurdity reviving. Venesection became vastly popular, and amongst its many votaries it found not a few victims. This freak suggested another, diametrically its opposite. The public were respectfully informed that "the life of the flesh is in the blood," and on no account whatever ought it to be spilt. The cutting fellows of the old school were forthwith denounced by the "new lights" as little better than assassins and cannibals; and to make a man's nose bleed was a criminality kindred to cutting his head off. Youngsters were prohibited penknifes; the axyrite threatened to supplant the razor; and pins and needles were fast losing their popularity, from their dreadful tendency to cause punctured wounds! Any solution of continuity, even a scratch, if blood were on it, was a sight as "horrible and awful" as anything that startled the vision of Tam o'Shanter at Kirk Alloway. This absurdity, of course, took as readily as the other, because there was something new about it, and it broached no half measures, but went plump *in extremis*, as though [illegible] no doubt about it. Had these opposing [illegible] carried no danger with them, but been [illegible]ulous merely, right well might one have laughed to see humanity, yclept rational, so divided against itself, that whilst one would be bled almost to his last life drop for nothing, another would burn and boil away with a fever heat and torturing inflammation, and spare not a particle of blood, even to save his life! Such, however, was the fact—one more, added to the many instances of prejudice and perversion of which the world has been guilty aforetime. It is striking enough, but withal not strange, for both in public and professional life it has plenty of counterparts. Many a gin-shop is neighboured by a temperance hotel, and the disciples of either think the devotees of the other a strangely deluded set of beings. Not long ago, multitudes on the sick-list were being cured by swallowing the pills of a quack in such prodigious quantity that they furnished both the means and the material of evacuation; whilst equal numbers were "shuffling off" their ailments by partaking of simples in such infinitesimal quantities, that the microscope must be a very bold one that would engage to get a sight of them. At about the same distance in chronology we find cold water, inside and out, a cure for everything, providing it were used unsparingly, and nothing stronger drank in the meantime; multitudes were converted to its faith, and marvellous were the cures it performed. At this same period of time a remedy, as different from the former as light from darkness, as sunshine from shade, won its way into favour, and fairly rivalled cold water in the abolition of ailment. This remedy, which might have been a suggestion of the brains of some fervid old alchemist, parched by a furnace heat, and by custom made fond of it—this crack remedy that really seemed to convey the idea of having something unearthly about it—was neither more nor less than—— BRANDY AND SALT. Molten lead, liquid sulphur, boiling pitch, and boiling water, are all very well in their way, and for the purposes they are required to serve; but we know they have never had any human purpose in view, except in the form of punishment. How near brandy and salt may approach to these said things is best known to those who have tried it. For ourselves, we should imagine the distance to be not worth a mention; and yet it found victims who scalded and scorched their throats with it as willingly as any infatuated Hindoo whoever burnt herself upon a pile. But it was not a mere affair of scalding and scorching; it worked wonders of healing—diseases the most inveterate and intractable yielded to its influence—and though it neither restored the dead to life, nor turned old people into young, it stopped little short of doing both. At any rate, its fame equalled that of its antagonism, cold water. We leave it to the patients of the two parties to say which is the better or the worse of them.

MR. LAWRENCE.

The vote of "disapprobation" on this gentleman by the Council of the College of Surgeons is said to have been rescinded. The question, we have reason to understand, is not, however, wholly set at rest. The pot calling the kettle *black*, was not without its comedy—but the pot *correcting* itself and calling the kettle not black, is something more amusing. The Council is certainly exquisitely on good terms. Beautiful is it for brothers so to dwell in harmony.

Dr. Attilio Menucucci, of Rome, employs the juice of the urtica urens as a hæmostatic remedy, and he says with marked success. He also has recourse to it in cases of relaxation of the uterus, by introducing into the vagina a sponge soaked in the juice, previously mixed with warm water.

TRANSACTIONS OF LEARNED SOCIETIES.

SURGICAL SOCIETY OF DUBLIN.

Meeting of the 21st of March.

[From our own Correspondent]

R. Carmichael, Esq., President of the College, in the Chair.

On Puncturing the Membrani Tympani.

Mr. Butcher made some lengthened remarks on the subject of the above operation—one, he observed, which, though looked on with distrust, or altogether deprecated by many, is but too readily put in practice by others. He did not by any means assert that cases never occur in which the operation may not be called for, but he contended that they must be comparatively few, and for these very important reasons, that in many instances it is utterly impossible to distinguish between functional disease of the nerve, when not well marked, and obliteration of the Eustachian tubes near the tympanum, added to which there are the malformations of the middle ear during development, their fœtal conditions being often permanently retained.

Mr. Butcher then proceeded to support his views by a detail of cases, and began with that which had been the subject of this operation, as first practised by Sir A. Cooper. A young man, aged seventeen, was so deaf from birth as to have been unfitted for business of any kind; the fauces, too, were so imperfect as to render him incapable of blowing his nose; but the perfect condition of the auditory nerves was proved by his hearing distinctly a watch placed between his teeth, or against the bones of the head; he never had a buzzing noise in the ears. The membranes of both ears were pierced in this case, and with the happiest results, as far as we learn from the record of its cure, which, as Mr. Butcher observed, extends only to the second month after the operation,—the case, however, being one peculiarly favourable for the purpose. The results of the operation in various other cases recorded by Sir Astley Cooper, ought not, Mr. Butcher observes, to lead to any favourable conclusion respecting it, because of the deficiency in diagnosis and mode of characterising the respective cases; at least, they can become valuable only after further experiments and better diagnosticated cases. He was the more satisfied of this, too, from the fact of Dubois, following the dictates of Sir Astley, having punctured the membrana tympani four times without success in any. The want of success cannot, Mr. Butcher observes be attributed, as it one time was, to union of the divided membrane, inasmuch as Fabrizi's trochar effects the long sought for desideratum of cutting a piece fairly out. May it not, he asks, be more fairly ascribed to the sudden and unaccustomed stimulus, producing a complete insensibility of the acoustic nerve? Mr. Butcher made some general allusions to the anatomy of the membrana tympani, and dwelt upon its copious vascular and nervous supplies; its vitality, he observed, appearing to have been overlooked by rash experimenters, who seemed to have lost sight of the facility with which a destructive process, once generated in it, is propagated to the neighbouring parts, particularly to the lining membrane of the tympanum; and though inflammation of a chronic or of a strumous character often produces considerable local destruction, yet, he maintained that a vast difference in character exists between that species of inflammation and what we should expect to arise from injury, which latter is much more likely to spread to the membranes of the brain.

Mr. Butcher now detailed two cases, in which, for a day or so, temporary restoration of hearing followed the puncturing of this membrane; but head symptoms of the severest character quickly supervened and terminated in the death of the individuals. In one of these, a young man, aged twenty, complained of deafness in the right ear twelve months previous to his death, and had his tympanum pierced by a surgeon in this city. The hearing was at first slightly improved, but after three weeks, he was as deaf as before, and from this period were superadded periodic attacks of headache with loud noises, which latter were particularly troublesome; there was also a constant dull, heavy pain in the affected ear, which was

occasionally exacerbating. General indisposition ultimately set in, marked by restless nights, loss of appetite, and those periodic headaches, which now rumbled with greater or less intensity to various parts of the head; these symptoms, together with an unaccountable lassitude, constituted the history of the case, until within a fortnight of his death, at which time he was seized with rigors and all the other symptoms of fever. The head-affection now assumed a most violent character, and, notwithstanding the most energetic treatment, the symptoms gained ground, and he died.

On examination, the pia mater was found exceedingly vascular, and the ventricles contained at least six ounces of thin straw-coloured fluid; there was softening of the septum lucidum, and the thin thread-like bands of its white structure floated about in the fluid. The dura and pia mater at the middle fossa of the right side of the base of the skull were much more vascular than elsewhere, and, on lifting up carefully the middle lobe of the right central hemisphere, a streaking of healthy looking purulent matter was found, communicating with an abscess, about the size of a small walnut, situated in the anterior part of the right lobe of the cerebellum, the brainy matter surrounding which was rendered very firm. The dura mater covering the upper and under surface of the petrous bone was much thickened and rough. A small tumour, about the size of a bean, lay on the auditory portion of the seventh pair of nerves. There was no opportunity of examining the bony structure of the ear. Mr. Butcher exhibited to the Society a preparation of the brain of this case, the seat of the abscess and the small tumour being very distinctly perceptible.

The *rationale* of the case, Mr. Butcher considered, was very plain, viz., that inflammation attacked the tympanum after the operation, and was transmitted to the brain. It also bore him out, he thought, in the statement he had made a few minutes ago, namely, the difficulty of distinguishing between functional affections of the nerve, when not to any great extent, and obstruction of the Eustachian tube, high up. For in this case, evidently, the deafness arose from the pressure of the tumour on the nerves, while the surgeon clearly acted on the belief that the Eustachian tube was the part affected.

The President, in commenting upon the cases brought forward by Mr. Butcher, mentioned some instances of violent inflammation of the tympanum, attended with swelling of the periosteum covering the mastoid process, in which, after the failure of leeches and various other remedies, the most decided relief was obtained from cutting down upon and dividing the inflamed periosteum. Cases frequently occur, he observed, in which violent pain in the ear is entirely symptomatic of disease in the brain, and in which if the tympanum were punctured death would most likely be attributed to the operation. A case of this kind had been published, with others, by the President, in the *Dublin Medical Journal*, for 1834, with a view of introducing to the profession the vast advantages resulting from the exhibition of mercury in inflammatory affections of the brain. The use of this remedy, then first suggested in those cases, became generally adopted in this country; but some years after he (Mr. Carmichael) attended the meeting of the British Association, at Bristol, on which occasion Dr. Pritchard, of that city, read a paper on inflammatory diseases of the brain, in which that celebrated practitioner recommended deep incision in the scalp, but did not in the slightest degree allude to the use of mercury, so generally employed with advantage in this country. Dr. Pritchard seemed astonished when informed of our practice, which induced him (the President) to conclude that at that period it had not been adopted in England.

Professor Jacob thought Mr. Butcher's cases particularly valuable, as furnishing two well-marked examples of loss of life from the inflammation consequent on puncturing the membrana tympani, and was only surprised, he said, that many such cases are not heard of, it being a habit with persons to perform the operation for the mere acquirement of a temporary celebrity, well knowing that the relief obtained is equally short-lived. The cases recorded in which Sir Astley Cooper performed the operation, and the results obtained, were, he remarked, but few; and though Sir Astley did perform the operation frequently, he did it in a very delicate manner, by merely passing the sharp end of a silver probe in and out of the membrane. He used at the same time to say to the pupils that a mere temporary improvement would be produced. The operation, however, obtained for Sir Astley considerable celebrity, as also the Copley medal for his communication published in the Philosophical Transactions, though the operation was before a year found by no means to be attended with the success generally anticipated.

Dr. H. Kennedy could not think it strictly justifiable to connect as cause and effect the terminations the operation in the cases detailed by Mr. Butcher, inasmuch as he had himself seen, and many others present must have seen, similar cases terminate in a similar way, where no operation at all had been performed; besides, the most trifling operations are now and then followed by equally unfortunate results. For these reasons he did not think we should be deterred from occasionally having recourse to it, though as yet it has not been known to be attended with much benefit.

Mr. Butcher considered that Dr. Kennedy's remarks only tended to support the views he himself advocated. For if, in these cases, it be admitted that a slow, chronic inflammation of a scrofulous character exists with a tendency to spread and ultimately involve the brain, how much more likely would it not be for such an occurrence to take place, with the addition of an injury like that from puncturing its membranes, to so sensitive an organ as the tympanum?

Dr. Benson was not an advocate for the operation; on the contrary, he was rather opposed to it on principle. Neither the physiology nor pathology of the ear would lead one to hope for much benefit from the practice; nor did experience add much in the way of encouragement. Yet he did not think the cases now brought forward sufficient to condemn it entirely. Some cases might be suited for the operation, others not; and to get rid of so great a calamity as deafness, some risk might reasonably be undergone. He would ask if there be not many recorded cases in which the operation has been performed with permanent benefit, and are there many in which fatal consequences could fairly be attributed to it?

Anomalous Cases of Disease.

Dr. Durby, of Bray, felt anxious to place before the society the particulars of some cases that occurred in the Rathdown workhouse. Their violence and peculiarity led him to think they would not prove uninteresting at this particular time, when it may be apprehended that this country is threatened with a heavy visitation from disease.

A sickly boy, aged fourteen, was found, on the morning of the 23rd January, in an almost insensible state, a quantity of liquid discharges having passed from his stomach and bowels during the night; his aspect was that of a person in the collapsed stage of cholera; face pale and sunk; surface cold and clammy; eyes glassy; pupils dilated; voice husky and peculiar when he cried out, for he did not speak; the pulse about 90, and a mere thread; frequent spasm and convulsion of the abdominal muscles, rendering it necessary to have him held down in bed; frequent vomiting of a colourless glairy fluid. Hot bath, sinapisms, blisters, and other measures, entirely failed to produce any amendment, and, after sixty or sixty-five hours apparently great pain, he died, without having spoken or swallowed from the time he was first seen. No autopsy.

In a second case, a healthy boy, aged ten, first complained while at breakfast. When seen in an hour after, his appearance was that of a person recovering from an epileptic fit: face flushed; skin warm; pulse 110; pupils dilated; required to be roused before he would answer questions; complained of severe pain in the abdomen, upon pressing which he cried out. There was vomiting of a viscid green fluid, and he had neither passed urine nor fæces from the morning before; belly tumid. The head was shaved and leeched extensively, blisters and sinapisms were applied, and calomel with Dover's powders given every hour. Next day, however, he was comatose, and remained so until the 7th, when he was observed to be covered with a profuse sweat, is said to have spoken, and taken some wine, and died in an hour after.

At the autopsy, sixteen hours after, the arachnoid covering the convolutions of the brain, presented patches of lymph on its surface; the ventricles contained about two ounces of serum, with shreds of lymph in the fluid; pons and medulla oblongata coated with yellow lymph; brain firm; thoracic and abdominal viscera healthy; the latter rather congested.

Dr. Durby related several other cases in which the symptoms as above were more or less violent, followed usually by fever symptoms after a few days. The subjects were all boys, about the ages of ten, eleven, and twelve; and it appeared strange, he said, that disease should fix upon a particular class in the house to the exemption of the rest, and not depend on some special cause. Yet after investigating closely the circumstances of bedding, cleanliness, ventilation, food, &c., he could discover none.

In reply to a question put by the President, Dr. Durby said the potatoes used in the institution were excellent, being much superior to those obtainable by persons in the higher ranks of life.

The President's reason for making the inquiry was, he said, that on a late occasion—as he supposed Dr. Durby was aware—a very extraordinary affection resulting from the use of diseased potatoes was seen in the persons of a whole family brought to the Richmond Hospital.* There appeared to him to be a considerable degree of similarity as regarded the kind of symptoms at least; but the very marked feature in the cases at the Richmond Hospital was the intestinal paralysis.

On Poisoning by Oxalic Acid.

Dr. Geoghegan, the Professor of Medical Jurisprudence to the Dublin College of Surgeons, now presented, for the inspection of the Society, the stomachs of three persons, who had committed suicide by swallowing oxalic acid. Dr. Geoghegan observed that the parliamentary returns of death by poison, in England and Wales, for the years 1837 and 1838, showed that the use of oxalic acid for this purpose, during that period at least, was much less common than might be supposed, from the inclusion of this substance amongst the ordinary poisons of these countries. Knowing, however, the loose mode in which coroner's inquests are conducted, and the numerous cases likely to have been erroneously set down as natural death, the above returns can only be looked on as affording a rude approximation to the truth; yet this and the Sixth Report of the Registrar General of Births, &c., are the only documents affording extended statistical information on the subject. The following is the number of ordinary poisons included in a list of 543 cases, which come under judicial inquiry during the above-stated period:—Opium, 193; arsenical poisons, 186; mineral acids, 35; hydrocyanic acid, 34; oxalic acid, 19; mercurial poisons, 15; the whole making 482. The Registrar General records only two cases of poisoning by oxalic acid for the year 1840, a statement which Dr. Geoghegan thinks it difficult to look on as correct; more particularly as the poisoning by opium and arsenic, during the same period, appear to be evidently underrated. Dr. Geoghegan then made some remarks on the relative frequency of poisoning by oxalic acid in Great Britain and the continental states—a comparison, he observed, difficient to carry out, as far, at least, as regards France, the returns from which country only refer to cases brought to *trial*, excluding consequently many instances of death by this substance, which for obvious reasons, however, is seldom selected as the instrument of murder.

By the kindness of Drs. Leesom and Mason, the gentlemen who had conducted the respective inquiries in these cases, Dr. Geoghegan was enabled, he said, to exhibit the stomachs on the table. He regretted, however, he could do little more than explain the post-mortem appearances, as in two of the cases the symptoms were not observed. After detailing minutely the morbid appearances, Dr. Geoghegan made the following summary of the conditions usually observed in the recorded cases of poisoning by oxalic acid, as well as in those just detailed by himself. 1st. Contents of the colour of coffee-grounds, consisting of altered insoluble hæma-

tosine and mucus, and separating into a supernatant fluid and insoluble deposit. 2nd. Softening of mucous membrane, with various shades of brown coloration, erosions and gelatinisation. 3rd. Brownish black ramiform vascularity of subcutaneous tissue, owing to the imbibition of the acid contents.

The co-existence in similar cases of the latter condition with the state of contents just described, is, Dr. Geoghegan observed, most important to note, as the ramiform vascularity, or even diffuse brown discoloration, may, and does, present itself in many instances as the result of the action of the lactic acid of the gastric juice only. The fatal results in cases of poisoning by oxalic acid cannot, he remarked, be referred to the corrosion of the stomach as its chief cause, but rather to the contemporaneous and energetic action which it exerts in arresting the circulatory forces. It was much to be regretted, Dr. Geoghegan observed, that the other parts of the body, the blood, &c., were not examined in the above cases. No perforation was observed in any of them, though in one the contents, including a rather large amount of acid, remained in contact with the coats of the organ; the solvent energies being, however, diffused over a large surface.

The dose was not ascertained in any of the cases. The quantity of poison found in the contents—an inquiry constantly and ignorantly made by counsel, &c.—was in one case from three to four grains, but in the two others much larger in amount, especially in the third.

In detailing the tests of the presence of this poison, Dr. Geoghegan drew attention to the deutoxide of lead or minium, the peroxide of manganese, and the chloride of gold, as *supplementary* reagents frequently furnishing useful indications.

German physicians in public practice are, he observed, in the habit of using the two former, whose mode of action is referrible to the peculiar adjustment of carbon and oxygen in anhydrous oxalic acid, which, latter may, in relation to the present subject be viewed as constituted of one atom of carbonic acid, and one of carbonic oxide the latter of which is resolved into (escaping) carbonic acid, at the expense of the above mentioned oxides. The chloride of gold is rapidly reduced by a warm solution of the poison. The two former tests are probably characteristic, the latter only confirmatory.

From its less readily associating the organic matters present; Dr. Geoghegan prefers the employment of chloride of calcium, in order to eliminate oxalic acid in the form of oxalate of lime; for the acetate of lead generally resorted to carries down much of the modified gelatine, of which the mucous membrane is constituted, and which is held largely in solution in the acid stomachic contents; hence, on the liberation of the acid such gelatine again passes into solution, and vitiates the ultimate results. When a salt of lead is chosen for the elimination of the acid, Dr. Geoghegan deems it prudent to separate previously as much of the gelatine as possible by a solution of tannic acid; Dr. Geoghegan having found that attempting to remove the acid from its organic contamination by means of alcohol, as recommended by Orfila, is quite impracticable, the animal matters retaining almost the entire of the poison.

When about to test a solution with a salt of lime, Dr. Geoghegan has long been in the habit of adding a portion of the suspected fluid to a saturated solution of the *sulphate*, in preference to the more soluble salts, from its obviating objections arising from the presence of sulphates, citrates, and tartrates. An useful character, he adds, in recognising the oxalate of lime is its solubility in strong acetic acid.

In obtaining an oxalate of lime by means of chloride of calcium, Dr. Geoghegan considers the addition of ammonia inexpedient, as it is liable to throw down organic matter, and superfluous as the liberated hydrochloric acid if the solution be moderately dilute does not dissolve any appreciable amount of the oxalate of lime. The oxalate of lime, when obtained, is to be decomposed by a solution of bicarbonate of potass, with the usual precautions. Dr. Geoghegan concluded with a detail of the various results obtained from an investigation of the contents of the stomach in the first case by the several reagents.

PATHOLOGICAL SOCIETY OF DUBLIN.

Meeting of Feb. 28th, 1846.

Dr. Law in the Chair.

Dr. Corrigan detailed to the Society the particulars of the following case of perforation of the lung and pulmonary pleura:—

John Burke, aged twenty-three, was admitted to the Whitworth Hospital on the 20th instant. He had been subject for twelve months past to cough, with some difficulty of breathing, but was not obliged to discontinue his occupation, as a servant, until about a month previous to admission, at which time the cough became more troublesome, and the breathing more oppressed, on which account he sought admission. Slight dulness, together with mucous râle were detected under the right clavicle, signs which were sufficiently explained by the subsequent discovery of red solidification and some tubercular deposition in the apex of the right lung. In the left lung the signs of phthisis were also evident, but the points of interest connected with the case were these:—In four days after admission he first complained of a darting pain in the left side of the chest. On the 25th, while the patient was sitting on the night-chair, dyspnœa instantaneously became intensely urgent; the countenance indicated great obstruction to respiration; the skin grew cold; and he panted laboriously for breath. On removing him to bed and examining the chest, the whole of its left side sounded clear on percussion, and the heart was found not only to have moved towards the right side, but was felt pulsating strongly between the fifth and sixth right ribs. Succussion indicated the presence of fluid and air in the left side, but no bourdonnement amphorique, or metallic resonance, was perceptible when he spoke, nor ringing sound when he coughed. Thus there was well marked evidence of a large quantity of air and of some fluid in the chest, but the signs which indicate a free transit of air, or *permanently* open canal between the large bronchial tubes and the cavity of the pleura, were absent—viz., bourdonnement amphorique, which is produced by the free blowing backward and forward of air through the fistulous opening, and metallic resonance of voice and cough produced by the same. The man died in the evening of this day, and on making an examination, the left side of the chest, when opened into, gave exit to a gush of air, and the heart was found in the position at which it had been felt to pulsate during life. The right lung did not present much appearance of disease, but had at its upper portion tubercular depositions in two or three places. At the posterior and lower part of the upper lobe of the left lung, a small, nearly circular, opening of about two lines in diameter was found, surrounding which was a deposition of recent false membrane. The circular orifice of the pleura communicated with a tubercular cavity of the size of a pigeon's egg, the wall of which, next the cavity of the pleura, was soft, flexible, and thin, and capable of lying down on the opposite wall, and closing the orifice of the bronchial tube opening into it, just as the pliable valve of an air pump would lie down upon and close the opening covered by it.

The cause of death, and the power of affording relief in such cases as the present, were the points to which Dr. Corrigan was anxious to direct attention. His view of the case was, that on the rupture of the pleura occurring, a rush of air into the cavity of the pleura at once followed, and that by each successive effort of the patient to inspire and relieve himself, fresh additions were, for some time, made to the quantity of air admitted, until the cavity of the pleura was filled and distended. That from the flap-like opening of the tubercular covering, none could get back again through the cavity into the bronchial tubes, and that thus confined, condensed air became a distending power, suddenly forcing the heart over to the right side of the chest, and suddenly compressing the right lung, thus producing the suffocation, which soon terminated fatally. Dr. Corrigan was of opinion that such a case can be diagnosed by the concurrence of the signs which indicate pneumo-thorax, as in this case—viz., sudden dyspnœa, tympanitic sound on percussion, immediate displacement of the heart to the right side (when the attack is in the left), and succussion, with the absence at the same time of the signs which are owing to a free passage of air through the fistulous communications—viz., bourdonnement amphorique, and metallic resonance of cough and voice; hence in such a case again occurring, Dr. Corrigan would recommend the passing a small trochar through one of the intercostal spaces to give exit to the compressing air, which the flap-like covering of the tubercular cavity prevents from escaping, and the exit of which compressing air through the canula would relieve the opposite lung and obviate suffocation, just as removing the same amount of fluid from the cavity of the pleura would give relief in pleuritic effusion and pneumo-thorax. It would not, of course, cure the disease, but it would prolong life and diminish suffering, and many have lived with pneumo-thorax for a great number of years.

Cancer of the Abdomen and Genital Organs; Cancer of the Breast; Cancer of the Uterus and Bladder; Transition of Cancerous Disease.

Dr. O'Ferrall presented two or three specimens of malignant disease, which he considered interesting, as presenting some few peculiarities. In the first case, a woman, aged fifty, of well-marked cancerous aspect, was admitted to St. Vincent's Hospital for a cancerous tumour of the left labium, there being also a large cancerous mass in the right groin. The tumour of the labium was in the ulcerated stage, and exceedingly hard; that in the groin was of a softer consistence, exemplifying the disease termed encephaloid. There was no evidence of visceral disease. The woman was in a sinking condition, worn out by great pain and diarrhœa, for the relief of which palliatives were administered during three months, at the end of which time she sunk under the frequent recurrence of the diarrhœa. During this period, too, the tumour in the groin sloughed, leaving an enormous cavity. A cast of the recently made dissection, which had been taken after death by Mr. Butcher, was exhibited. It was impossible to make another examination of the abdominal viscera while the patient lived. The only attempt made at examination was upon the patient's admission, and, with respect to the viscera, he would observe, subsequent examinations discovered no trace of any tumour connected with them. The tumour of the labium, which he now exhibited, displayed a series of cancerous masses, hard, firm, and gristly to the touch, leaving no doubt whatever as to their cancerous nature. That of the groin, as he had before remarked, was of a softer consistence, the cavity remaining being like that which is seen after the sloughing of fungoid tumours. The next point—one to which he wished particularly to draw the attention of the Society—was that, upon throwing up the abdominal flaps, a tumour was discovered, lying in the sheath of the rectus muscle, presenting the distinct characteristics of encephaloid disease, and separated from the intestines only by the peritoneum. The tumour, he observed, must have been developed during the three months that followed the patient's admission to the hospital, for, had it existed when she came in, it could hardly have escaped detection. It was obvious, then, he said, that in the same case were displayed three modifications of malignant disease—one of scirrhus of the labium, the next of a mixed character in the groin, and the third a well-marked specimen of medullary disease in the sheath of the rectus. The lungs and liver were entirely free from any abnormal deposit; they presented, in fact, no trace of disease, and the escape of these important organs after the lengthened persistence of the discharging mass, he looked on as a fact of much interest—as showing that we are not to suppose a case of malignant disease *necessarily* accompanied with contamination of the intestines or lymphatic system. From this it would appear, then, that we are not to be deterred from removing these external tumours through fear of internal organs being involved, since it is seen that in this instance the disease ran its whole course, leaving the lungs, liver, &c., entirely exempt. The case possessed, he thought, another point of interest also, viz., the existence of true scirrhus and of encephaloid disease in the vicinity of each other, a fact which must set at rest the question (if there be any one who still entertains a doubt on the subject) of the essential identity of these two varieties of malignant disease.

Dr. O'Ferral here exhibited several drawings illustrative of this statement, one in which true encephaloid disease sprung up in the cicatrix remaining after extirpation of a female breast; another still more remarkable, in which a large cancerous tumour of the vagina and uterus, encroaching on the bladder, presented at one end true scirrhous characters, while at the other it was of a genuine fungoid nature. Thus there were before the society three specimens of the concurrence of all the varieties of malignant disease in the same subject: co-existing in the first case, consecutive in a second, and continuous in the same tumour in a third. For these reasons he thought the specimens would be interesting to the society.

MISCELLANEOUS CORRESPONDENCE.

GENERAL MEDICAL ANNUITY FUND.

[To the Editor of the Medical Times.]

SIR,—Since the publication of your very excellent remarks on the principles of the "General Medical Annuity Fund," and the honour you conferred upon me by inserting my letter in your very valuable periodical, I have been favoured with several letters from gentlemen who appear anxious to learn more upon the subject, and to possess a full understanding of its character, probable advantages, and bearings in a legal point of view.

If I am not trespassing too much upon your space, or infringing too much upon your good nature, I would take the liberty of answering these inquiries in the pages of the *Medical Times*, since I shall thereby accomplish a double purpose—inform my correspondents, and enlighten others who may, perhaps, be equally desirous of information, although they have not made direct application.

The many painful facts which have been presented to me during a somewhat lengthened professional life, the awful instances of distress from sudden bereavement, and the melancholy evils resulting to widows and orphans, of destitution and, oftentimes, of moral degradation, which a small permanent provision would have obviated, have seriously impressed my mind with the necessity of urging upon the profession, that it is a duty incumbent upon us to adopt some measures calculated to meet and overcome calamities so singularly distressing to every generous and benevolent mind.

The "benevolent fund" attached to the Provincial Medical and Surgical Association is peculiarly calculated to meet temporary difficulties, and perhaps if it could be carried out in the whole of its beautiful design, there might be no necessity for another institution as far as the provincial practitioners or its own members are concerned; for the spirit of its principles is more decidedly philanthropic than my own, inasmuch as it grants assistance to those who have never contributed to its funds. But the fact that it is purely charitable seemed to me one cause of paucity in its support, as the contributors do not indentify themselves as probable recipients of its bounty.

It is nevertheless a noble institution, and recommends itself especially to the support of all benevolent persons, for there necessarily will be cases which would lack assistance without its aid, and as its contributions are small, methinks that no member of that association should withhold his mite from it, or hesitate to give it unequivocal support. The Norfolk, Surrey, Kent, Yorkshire and other institutions of an analogous character speak volumes of praise to those individuals who have nobly sustained them, and distributed their funds to meet the casualties of disease and death. But while I give these societies my warmest approval, and bid them at the bottom of my heart "God speed," I cannot but think we require an institution on other principles than those which are of a purely *charitable nature*. The "General Medical Annuity Fund" combines co-operation, and consequently personal advantages; it intends permanent, not temporary relief; and contributes aid from year to year, so long as the parties receiving need it. In its character it is not much unlike the friendly societies, for all who contribute have legitimate claims, if circumstances impel them to make those claims; nor is the possession of some private property a bar to their eligibility, as they may not have sufficient for their due maintenance and support; and consequently are entitled to make known their wants, and claim assistance, which will not be withheld, if on a fair investigation their necessities are proved. It is true, to obtain this they will be subjected to inquiry, confidential, but strict, nor will any of the recipients of this fund be known publicly, but simply by their initials; therefore, the sting of the inquiry is removed, nor will the proudest mind be wounded by this proceeding, for after all they are but reaping the fruits of their own prudence; still it is essential they should be thus subjected, for it never could be supposed, either from the nature of the institution, or from the amount of the subscription, that every member could be a recipient, or that they could at once put in a *legal claim* as they might do for a life insurance, where the contributions are proportioned to the risk.

The high character and professional standing of the directors must be taken as a guarantee that the funds of the institution will be properly and judiciously appropriated. The permanent officers (with the exception of myself, whose office can be scarcely called one of trust only, as far as the advocacy and arrangement of the principles of the institution are concerned) are well known to the profession, and to speak of their merits would indeed be a work of supererogation, but the elective officers are to be appointed yearly at the annual meeting of the Provincial Medical and Surgical Association, and will doubtless be gentlemen as well known for their probity and high standing in the profession, as those whose office is permanent. The present list of elective directors may be regarded as a pledge for future character and professional importance.

Honorary local secretaries will be appointed for distant districts, and my hope is they will be scattered over the land freely, and by their energy and perseverance advance the interest of this, to me, dearly cherished project.

Respecting its recognised legal character, I presume that when its rules and regulations are finally adjusted, when it has indeed become as perfect in all its developments as human ingenuity and provident foresight can make it, it will be necessary to enrol it in the ordinary manner of friendly societies.

Five years for the gradual accumulation of capital must be regarded as a *sine quâ non*; for five years membership before participating of benefit is not only necessary, as regards the possession of a permanent fund, but as a security against imposition. thus: a person declining in health might remit five guineas as the whole amount of what he would be required to pay in the five years, and presume that if he died in a few months from that remittance his family would be eligible for an annuity. But common sense will tell any one that to grant an annuity under such circumstances would be to hold out a premium for neglect, and to neutralise the test of time demanded by every friendly institution, as a security against fraudulent and unfair membership.

It has been suggested also by many of my correspondents, some of whom have a very high place in my esteem, that persons advanced in life should be required to pay a larger sum than young members, as entrance fees, on the ground that their families might be fairly expected to fall early on the funds; and this would be a correct view of the case, and in accordance with the usages of other societies, were we to recognise every member as liable to become chargeable; but this institution combines philanthropy with co-operation, and the probability is that the great majority of contributors will not be recipients. Aged and wealthy gentlemen would doubtless object to pay entrance fees, but would freely part with their annual guinea, and give to us the sanction of their names; thus by demanding entrance fees we should lose all advantage to be derived from them, and I fear, in the end, receive but a poor equivalent for the loss.

One other subject is essential to be known; the five years necessary membership commenced from the Sheffield meeting, in July 1845. Gentlemen, therefore, who do not wish to lose a year, must pay their subscriptions before the 30th of June, 1846, when the books will be made up, and the whole business put into a train for the meeting of the directors at Norwich, where the Provincial Medical and Surgical Association will be held this year.

Dr. Percival, speaking of the local charitable institutions which were in existence in his day, has the following striking passage, which, I trust, your readers will pardon me for quoting.

"One comprehensive establishment seems to be more eligible than many on a smaller scale; for it would be conducted with superior dignity, regularity, and efficiency, with considerable saving in the aggregate of time, trouble, and expense, with more accuracy in calculations, relative to its funds, and, consequently with the utmost practicable extension of its dividends."*

In a monthly miscellany published at Oxford in 1750, entitled the *Student*, is detailed "a scheme to raise a fund for the maintenance of the widows and children of the inferior clergy." I could fancy that from this small beginning have emanated the different institutions now in operation for the widows and orphans of the clergy. The person who suggested the "scheme" was not a clergyman, but he advocated the cause with much zeal and ability; one passage I will quote as a spur to our own endeavours.

"We may observe how the men of trade unite themselves into societies, and contribute a certain sum weekly, or monthly, to make up a purse for the benefit of the whole. When any man is sick, he is allowed so much per week out of this fund till he can perform his business; and if any man die, his widow receives some handsome present from the common stock to comfort her for her loss. These are things done by the lowest rank of mechanics; and surely men of liberal education must have more extensive benevolence and generosity than the illiterate." If this reproach was sufficient to stir up the active benevolence of the clergy of that day to noble exertions, let the spirit of the dead which lives in this passage speak to the hearts of the living of our profession, and with love and energy in our souls, let us "go and do likewise."

In conclusion I trust the kind and generous appeal which you have made to the medical public, embodying facts, the result of your own experience—facts I fear which might be multiplied, by the experience of others, for such facts have come with fearful force upon my own mind—will not be lost; but that its very truthfulness may excite desire to remedy the evil. The officers of this institution are earnestly bent upon the establishment of a permanent good in the profession, they will abate nothing in their zeal and benevolence in furthering the object they have in view, but they ask for co-operation, they ask for the united zeal and energy of the whole profession, for without it their efforts are useless, but with it the final accomplishment of the project cannot even be problematical. The late political movement in the profession is a powerful evidence of what may be done when once our great energies are put in motion—if a corresponding movement could be excited on the behalf of benevolence how great would be the result! Surely the cause is sacred and worthy our best consideration, for be it remembered that God will strengthen the hand which sustains the widow and the fatherless, and bless the heart which yields them consolation in the hour of tribulation and misery.

Again thanking you for the helping hand so kindly and generously bestowed,

Allow me to remain, Sir,

Your obedient servant,

EDWARD DANIELL.

Newport Pagnell, Bucks, April 11, 1846.

P.S.—Several gentlemen having applied for rules, &c. Allow me to inform them that between 2000 and 3000 have already been distributed and the remaining copies are few; but the rules will be found as an appendix to my "Address."

* Vide Percival's Medical Ethics, ed. 1827, p 360.

The mortality in the hospitals at Oran is at present very great; during the last three months of the past year, more than a thousand deaths have occurred in the province of Oran alone.

SHAM ASSOCIATIONS.

Sir,—A meeting—so numerous that the attendants are said to have all gone home in *one* cab—was held at the Freemason's Tavern, on Saturday evening, of what is somewhat impudently called a "*Committee* of *Associated* Surgeons," the fact being that there is, and has been, no such *Association*, and that the thing called a Committee has had nothing entrusted or committed to it by any party or persons. It is, in short, a non-commissioned committee of an association *in nubibus*—the conjured-up ghost with which two or three politicians, out at elbows, hope to fight the solid reality of the National Association. A flaming report of the proceedings was foisted on some of the morning journals of Monday, in which speeches, and questions, and answers were attributed to a Mr. Bottomley, of Croydon; to a Mr. Lewis, of some place unmentioned; to a Mr. Jones, of Portland-street; to Mr. T. Wakley, the coroner; and to Mr. Yearsley, the tonsillatist. A Mr. Blixam's name is also mentioned, with a Mr. Ottley, thus completing the court circular of the aforesaid cab-load. Mr. Yearsley possesses a name not unadvertised. Mr. Wakley is as well known as he probably wishes to be. Mr. Bottomley, I surmise—it is a mere guess—is a person of considerable weight. Mr. Lewis, luckier than his compeers, has never before, we believe, been heard of; but as for Mr. Blixam and Mr. Jones, of Portland street, we are just thus far informed, that the *Medical Directory* does not include in the list of legitimate practitioners their, no doubt, very honourable names.

Is this kind of "humbug"—I know no better term—to go on for ever? Pray interpose, or you may again hear from

Public Decency.

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Reveillé-Parise (J. H.) Lettres de Gui Patin, précédes d'un notice biographique accompagnée de remarques, scientifiques, historiques, philosophiques et Litteraires, 1st vol., 8vo. 7 fr.

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Curling (T. B.) Die Krankheiten des Hodens, Saamenstranges und des Hodensackes praktisch dargestellt, 8vo, 2 Thlr. von Dr. F. F. Reichmeister.

Crackhaus (F. A.) Analekten für Frauenkrankheiten, 8vo. 20 ngr.

Guenther (A. F.) Commentatio de Hermaphroditismo cui adjecto sunt nonnullæ singulares observationes, 8vo, 18 ngr.

Warnatz (G. H.) Ueber das Glaukom, 8vo., 1½ th.

Andral (G.) Versuch einer Pathologischen Hämatologie, von Dr. G, Herzog, und Hasse, 8vo. 1 Thlr.

Schmidt (C. C.) Encyclopædie der gesammten Medicin. Band vi., 8vo. 18 Thlr.

Transactions of the Medical Society of London, new series, vol. 1, 8vo. 9s cl.

Transactions of the Provincial Medical and Surgical Association, vol. 14, cl. 15s

Carpenter's (W. B.) Manual of Physiology, including Physiological Anatomy, 12mo. 12s 6d

Fownes' (G.) Chemical Tables, folio, 2s 6d

Fownes (G.) an Introduction to Qualitative Analysis, 8vo. 2s

Laennec's (R. T. H.) Treatise on Auscultation, with notes by Drs. Herbert and Ramadge, 8vo. 18s cl.

Phillips (B.) Scrofula; its Nature, its Prevalence, its Causes, and the Principles of Treatment, 8vo. 12s.

Carpenter (Dr.) Manual of Physiology, 8vo. 12s 6d

Wilson (Dr.) Medical Notes on China, 8vo. 10s 6l.

Robertson (W. H.) the Nature and Treatment of Gout, 8vo. 10s 6d cl.

Owen (Prof. R.) History of British Fossil Mammalia and Birds, illustrations, £1 10s 6d (just completed)

Brodie's (Sir B. C.) Lectures illustrative of various Subjects in Pathology and Surgery, 8vo. 12s cl.

Waterhouse (G. R.) a Natural History of the Mammalia, part 5 (monthly), 8vo. 2s 6d

Bower (M. N.) Memoranda on difficult Subjects in Anatomy, Surgery, and Physiology; forming a pocket companion for the young surgeon, or for students preparing for examination, 2nd ed. 32mo. cloth, 3s 6d

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Lawrence (Wm.) The Hunterian Oration delivered at the Royal College of Surgeons on the 14th of February, 1846, 8vo, 2s

Lindley (J.) The Vegetable Kingdom; or the Structure, Classification, and Uses of Plants, illustrated upon a natural system. Illustrations, 8vo. £1 10s

Philosophical Transactions of the Royal Society of London, for the year 1846, part 1, 4to. 7s 6d

GOSSIP OF THE WEEK.

Concealment of Birth in Bavaria.—According to the criminal code of Bavaria, concealment of pregnancy and delivery is not punishable, unless such concealment cause the injury or death of the child, or be intended as a preparation for its murder. This enactment, however humane it appears at first sight, is most injurious to morals, for it greatly conduces to the procuring of abortion, and infanticide. Dr. Gaderman denies the assertion in a criminal code that "infanticide would be occasioned by punishing concealment of pregnancy or delivery simply; he points out that the criminal code pays too little regard to the circumstance, that the investigation into concealment of pregnancy or delivery is among the most difficult, uncertain, and doubtful, in legal medicine, and that, on account of these circumstances, the accused frequently escape, and the difficulty is much increased when it is necessary to prove, if the child is born dead, that its death was a consequence of the concealment of pregnancy, or, where it is born alive, that its subsequent death was a consequence of the concealment of delivery.

New Lunatic Asylums.—At the last meeting of the county magistrates at Preston, it was proposed in consequence of the large number of pauper lunatics within the county, that two lunatic asylums be established, the one to be situated in Salford Hundred, and the other in the Hundred of West Derby. It appears that not one half the pauper lunatics of the county are domiciled in the present asylum near Lancaster, only 658 out of about 1400, being properly located, the remainder are dispersed in the various workhouses, or buildings connected with them, to the serious inconvenience of the sick poor, who are obliged to submit to the shouting and screaming of their less fortunate brethren.

A civil hospital is about to be built at Constantinople, at the expense of the dowager sultana. It will be afterwards supported by the government.

Blood-Corpuscles.—At the last meeting of the Zoological Society a communication was read by Mr. Gulliver, from Dr. Davy, on the blood-corpuscles of the humming bird; this talented microscopist took occasion to remark that they were, as he expected, the smallest yet described among birds. Referring to his elaborate tables of his collected measurements of the blood-corpuscles of vertebrata, published in the proceedings of the Zoological Society of London, October 14, 1845, Mr. Gulliver observed that, although there is no connection between the size of the blood-corpuscles and that of the animal in mammalia of different orders, there is such a connection in the same natural family, as in the *Ruminants* and *Rodents*; that is to say, the largest species of one family have regularly larger blood corpuscles than the smallest species of that family. Now, he shows that the law for the size of the blood-corpuscles is the same in the entire class of birds as in a single family of mamals; for his copious tables of measurements contain no example of large blood-corpuscles in the smallest birds, or of comparatively minute corpuscles in the largest birds. Mr. Gulliver also read a paper at a former meeting of this Society on the spermatozoa, having availed himself of the opportunity afforded by the sudden death of the large Polar bear at the Zoological Gardens, Regent's Park, on which occasion he examined the spermatozoa of that animal, and observed that they resembled in all respects the spermatozoa of numerous other mamalia, and have none of those special marks of organisation described and figured as the spermatozoa of the bear by Professor Valentin. Hence, notwithstanding Valentin's observations, Mr. Gulliver remarked, that it is still a question whether the spermatozoa be independent beings or merely free and floating cilia.

Samuel Devenish, Esq., the senior surgeon to the Honiton Dispensary, has recently been elected surgeon to the first division of the Union.

Obituary.—At Lasswade, 25th ultimo, George Ledingham, M.D., assistant-surgeon, 87th Fusiliers. On his passage to England, in the Apollo, Mr. William Chartras, late surgeon of H. M. surveying-vessel, Philomel. April 5th, at Knock Boyne, Luke Byron, M.D., surgeon of the county of Meath Infirmary.

Appointments.—Assistant-surgeons: J. Reid, from the Museum at Haslar, to the Rodney, vice Whitmarsh, promoted; J. Findley to the Excellent.

War-Office, April 14th.—3rd Dragoon Guards: Assistant-surgeon Henry Mapleton, M. D., from 40th Foot, to be assistant-surgeon, vice Tufnell, appointed to the Staff. 56th Foot: Assistant-surgeon Thomas D'Arcey, from the 85th Foot, to be assist.-surgeon, vice Campbell, promoted. 87th Foot: Assistant-surgeon Henry Clinton Martin, from the Staff, to be assistant-surgeon, vice Ledingham, deceased. 65th Foot: Assistant-surgeon Robert Keating Prendergast, from the 90th Foot, to be surgeon, vice Marshall, appointed to the 84th Foot. 70th Foot: Assistant-surgeon Henry Pilleau, from the Staff, to be surgeon, vice Mabarg,, deceased.

MORTALITY TABLE,

For the week ending April 11, 1846.

Causes of Death.	Total.	Average of 5 summers	Average of 5 years
All Causes . . .	861	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	144	162	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	85	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	159	155	157
Diseases of the Lungs, and of the other Organs of Respiration	270	271	294
Diseases of the Heart and Blood-vessels . . .	37	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	70	65	72
Diseases of the Kidneys, &c.	6	7	7
Childbirth, Diseases of the Uterus, &c.	12	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . . .	6	7	7
Diseases of the Skin, Cellular Tissues, &c.	3	1	2
Old Age	39	60	67
Violence, Privation, Cold, and Intemperance . .	32	25	26

No. 343. **SUMMARY.** April 25.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of the 13th April, 1846; M. Mathieu in the Chair.

Formation of Organic Tissues.—M. Payen has long since shown that the chief component of vegetable matter, cellulose, is chemically identical with starch, gum, and sugar, is convertible into each of these substances, and differs from them only by its atomic disposition, and by the property it enjoys of assuming the cellular shape. Lichens, containing cellulose in a weakly organised condition, yield under the action of boiling water nutritious jellies; but when the organisation of the elementary principle is more advanced, as it is, for instance, in the textile fibres of cotton, flax, and hemp, it resists energetically the solvent powers of the digestive apparatus. Cellulose is a ternary substance, composed of oxygen, hydrogen, and carbon; nitrogen in plants pre-exists to the formation of cells, in the extremely thin walls of which it is merely incarcerated. The deposition of ligneous matter takes place only with the progress of age, and constitutes by its abundance the differences between hard and soft woods. It had been hitherto supposed that animal textures differed from vegetable tissues, particularly by the presence of nitrogen in a state of combination; and that animal membranes were quaternary substances. M. Schmidt, in the first place, MM. Kœlliker and Lœwig, after him, have demonstrated that in one class of mollusca (mollusques tuniciers), the general envelope of the animal is essentially formed of cellulose, identical with the same substance in the vegetable kingdom; both are acted upon in the same manner by sulphuric acid, being first changed into a substance which iodine colours blue, and being both transformed into dextrine by a prolonged action of the acid. In their state of integrity, the envelopes of the above mentioned mollusca contain twenty-seven per cent. of nitrogen, which acids and potash easily remove, leaving only three per cent.—a circumstance to which is due the interesting discovery of the identity of nature of vegetable and animal cellulose.

The Baron Liebig *versus* Messrs. Gerhardt and Laurent.—Professor Liebig, having carried sulphocyanogen to a red heat, found that this substance was decomposed, and gave birth to sulphur, sulphuret of carbon, and a lemon-coloured powder, insoluble in water and alcohol, and yielding at a white heat three volumes of cyanogen and one of nitrogen. With this powder, potassium combined with a strong disengagement of light, and hydrogen formed with it a compound analogous by its properties to hydrocyanic acid. The newly discovered body Professor Liebig called "mellon," and represented it by $C^6 N^8$. The constitution of mellon, as announced by the illustrious dean, was soon contested by M. Voelkel, in a treatise on the compounds of sulphocyanogen, and Professor Gerhardt also questioned the results of Baron Liebig's experiments. The latter resumed his researches on the subject, and persisted in his original statements, pointing out the mellonuret of mercury as furnishing perfectly pure mellon by distillation. In a first paper, Messrs. Laurent and Gerhardt endeavoured to establish that the mellon was nothing else than an acid, and that Baron Liebig's mellonurets were real salts. Baron Liebig, in an answer, inserted in the *Revue Scientifique*, charged the experiments of the French chemists with inaccuracy, and they instantly forwarded to the Institute a complete refutation of Baron Liebig's ideas on the compounds of mellon and sulphocyanogen. In their opinions, mellon should no longer be represented by $C^6 N^8$, but by $C^6 H^3 N^9$; it does not combine with potassium, but forms with it a salt with a double basis, $C^6 N^8 M^2$, with a disengagement of ammonia. As a consequence of their researches, Messrs. Laurent and Gerhardt stated that M. Liebig's sulphocyanogen contained hydrogen—that the *melane* was only a mixture of mellon and polyene—that the *formula* of the *chlorocyanamide* was erroneous—and that the decomposition of the latter substance by heat, besides mellon and muriate of ammonia, gave one equivalent of *muriatic acid*; and, therefore, that Baron Liebig's theory of mellonic compounds was fundamentally wrong. Such is the origin of the chemical debate still pending before the Institute of France—a debate in which both parties have hitherto displayed far more talent than temper, and have allowed themselves to be carried by the energy of their convictions beyond the usual limits assigned to scientific discussion.

Spontaneous Hydrophobia—Rabies in Herbivorous Animals.—Dr. Gurzon, chief surgeon of the African army, states that during the month of January a veterinary surgeon died in Algiers of spontaneous hydrophobia. Dr. Gurzon's communication containing no details as to the origin, symptoms, progress, and post-mortem examination of the case, it becomes quite impossible to draw from it any conclusions of a practical nature; and we must still remain in doubt, whether, in this instance, as in many others, the horror of liquids and of shining bodies was merely symptomatic of acute cerebral disorder, or of that special disease which results from the bite of a rabid animal. We may also notice another part of Dr. Gurzon's letter, wherein it is stated, that although herbivorous animals do not become spontaneously rabid, still rabies can be communicated to them by a bite. He reports two instances of horses who, having been bit by mad dogs, became affected with hydrophobia; in one of the horses incubation of the disease lasted sixty days, and the animal wounded a man and a horse, on whom no symptoms have hitherto appeared.

ACADEMY OF MEDICINE

Meeting of April 14th, 1846; Dr. Roche in the Chair.

The Plague.—M. Rochoux inquired why the discussion on the quarantine question was not resumed? M. Prus regretted it had not been in the power of the commission to meet during the preceding week, and consequently a further delay was still necessary.

Presence of Salts of Copper and Lead in Distilled Waters.—M. Guibourt read a report on a communication by M. Brifault, relative to the presence of mineral poisons in distilled waters—orange flower water, for instance. According to the author of the communication, the noxious substances contained in the distilled waters are due to the nature and condition of the vases in which they are preserved. M. Guibourt proposed that the thanks of the Academy be forwarded to M. Brifault, and that a letter be addressed to the minister of agriculture and commerce on the subject, requesting him to enforce the use of glass vases, or at least to fix the standard of the tin to be employed on all domestic purposes, and recommending that five per cent. of alloy at most be tolerated. M. Chevalier: Copper and leaden vases may certainly become the cause of serious alteration of the contained fluids; but other vases are in common use which I think more dangerous still—zinc vessels not only are used for distilled waters, but are almost exclusively employed in the south of France to receive oils, by which they are speedily attacked, the contained oil becoming a powerful emetic; it would, therefore, be necessary to proscribe zinc as well as copper and leaden vases. The report was unanimously adopted, with Professor Chevalier's suggestion.

ANATOMICAL SOCIETY.

Meeting of April 17th, 1846; Professor Cruveilhier in the Chair.

M. Pigné read a report on a case of stricture of the cœcum, with dilatation and hypertrophy of the small intestine, and atrophy of the colon. The following is an abstract of the report, which was unanimously adopted by the Society:—The point towards which the reporter directed chiefly the attention of the meeting, was the hypertrophous condition of the small intestines. It is a law which has been long since demonstrated, that an increase of size is always produced by an increase of the functions of any organ. Morgagni had already said, "Quia crebriores et validiores motus, major musculorum crassitudo sequitur"—a proposition which is susceptible of receiving numerous illustrations, and is not less true when applied to organs of nutrition than to those of relation. A physical obstacle of any kind to the progress of the blood through the origin and arch of the aorta, produces as an immediate consequence an increase in the action of the heart, proportionate to the obstacle to be overcome; and this increase of activity very soon brings on a thickening of the walls of the left cavities of the viscus. The right side of the heart we find hypertrophied by an obstacle to the circulation of the venous blood in the pulmonary artery or in the lung. A hernia—a stricture of the intestine—a tumour compressing its walls—will cause an arrest in the progress of fœcal matter through its cavities. A dilatation above the stricture forms, and the intestinal parietes, contracting with more than their accustomed energy, become soon hypertrophied. The same remarks may be applied to the state of the urinary bladder and urethra, behind a stricture of the passage. Let the neck of the womb be obliterated; the catamenial secretion must accumulate in the cavity of the organ, the walls of which will, in a short time, be thickened, in consequence of its efforts to get rid of the accidental deposit. Hypertrophy of an organ results, therefore, in many instances, from an increase in its functional activity, and it is for that reason M. Pigné calls it functional hypertrophy, in contradistinction to nutritive hypertrophy, the cause of which is different. We meet with this same functional hypertrophy in all other organs. Thus, suppose one kidney destroyed by disease, the other kidney is obliged to perform double duty, and speedily increases in size. By mercurial salivation, the secretion of saliva is much more abundant than during health, and we find the glands also enlarged. When one lung is incapacitated by any cause from accomplishing its important function, the healthy lung is observed to breathe with greater frequency and energy than during health, and the increase of its size is proved by the depressions left on its surface by contact with the internal face of the ribs. Women who suckle only from one breast, offer an hypertrophy of the mamma which has been called into action

and a comparative atrophy of the other. In the case which occasions the present report, the end of the small intestine was considerably hypertrophied, in consequence of a stricture of the cœcum. Let us, therefore, examine the question of hypertrophy in organs of excretion. The hypertrophy of excretory organs is always proportioned to the intensity of the obstacle to be overcome, and to the strength of the patient. It is also more considerable when the obstacle has been of long duration than when it is recent; dilatation of the cavity only takes place when its walls have, by the gradual accumulation of their contents, lost their elasticity; the parietes then become thinner at the expense of their first increase in thickness. Another series of anatomical alterations is also observed: the ducts through which the arrested fluids were to pass, become obliterated, and the accumulated matter above the obstacle rises gradually until it causes compression of the elaborating viscus itself, in which it at last develops morbid action; this is often observed in the kidneys, and some apoplectic congestions of the lungs acknowledge no other cause; hence, also, œdema and serous effusions from impeded venous circulation. Excessive distension terminates in one of three modes—1, Rupture; 2, Inflammation and ulceration; 3, Hernia of the mucous membrane through the muscular fibres, fresh distension, and ultimate rupture of these newly-formed appendices. The history of hypertrophy in organs of excretion presents, therefore, two distinct periods: in the first, the walls are thickened and the cavity slightly enlarged or diminished; in the second, there is dilatation of the cavity and increase of thinness of the walls.

HOSPITAL NECKER.

April 17th.

CLINICAL LECTURE. *Diseases of Infants;* By PROFESSOR TROUSSEAU.

Sclerema.—The nature of this disease has been the text of much difference of opinion. M. Valleix looks upon it as a form of œdema; others consider it as a sort of inflammatory state of the subcutaneous cellular tissue. It has also been compared to what Vogel calls in animals, "febris roborosa"—a disease of a spasmodic nature, in which the soft parts acquire a degree of solidity graphically compared to the hardness of *oak;* this was in some measure the opinion entertained by Dugés relative to this disease; but we think the word spasmodic is misapplied, when used in reference to textures which are not muscular. Sclerema has been also attributed to patency of the foramen ovale, to pulmonary œdema, to pneumonia, to incomplete development of the organs of respiration, and, lastly, to cutaneous or hepatic affections. It is probable that many maladies have been confounded under this one comprehensive appellation, "induration of the cellular tissue," and this would account, in a satifactory manner, for the numerous physical conditions to which sclerema has been referred. You have seen that pressure of the skin did not cause pitting, as in cases of œdema; and that, on dividing the skin after death, not a drop of fluid escaped from the cellular tissue. We cannot, therefore, consider the malady as identical with œdema. The statistics of the Foundling Hospital in Paris show that of 300 cases of sclerema, 200 have proved fatal. The coldest months of the year are also those during which the complaint is observed with greatest frequency. The influence of cold on the production of this malady is a demonstrated fact, as it is in the anasarca which sometimes follows scarlatina. Indeed, we may look upon the physical condition of the body after scarlatina, as resembling closely that of a newly-born child. Its vascularity and desquamation increase its natural susceptibility to atmospheric mutations.

Meningitis—Macula Meningitica.—We will now turn to the consideration of some important points of the diagnosis of meningitis in children. Let us begin by narrating rapidly the cases of two little patients at present in our wards. One, aged three years, admitted on Sunday, had been previously perfectly healthy, and up to Saturday last had presented no sign whatever of illness. On Saturday evening he was suddenly attacked with convulsions, and sank into a state of stupor. Was this stupor to be referred to meningitis or to idiopathic convulsions? No spontaneous vomiting had taken place. The pressure of the finger produced, however, very readily persisting stains on the skin of the chest. Meningitis was diagnosed, and the symptoms which have since appeared fully confirm that diagnosis. The stupor has increased, and the respiration presents a characteristic sign, towards which I beg to direct, very particularly, your attention. Three and four rapid inspirations follow each other, and are immediately succeeded with six, eight, or nine seconds of absolute repose of the chest, during which the child does not breathe. This interruption of the respiration, which I have observed to last *fifty-seven seconds* in one case, occurs only in meningitis. The state of the pulse in most diseases is always in harmony with the respiration; the pulse generally being in acute disorders four times as frequent as the respiration, so that by counting the one, you may, in most instances, form an accurate estimate of the other; not so, in meningitis. In one child I counted only *three* inspirations in one minute, and yet the pulse beat 200 times. In the infant who is at present under observation, the pulse marks 214. This ataxic state of the functions in meningitis is truly remarkable. You will also notice that, although this child has taken no food for three days, still he has not fallen away.

The other child was twenty-three months old; he had been ill two months, suffering from loss of spirits, feverishness, and cough—the prodromic signs attributed by Dr. Rilliet to meningitis—but observed that the child's liver was very large, descending as low as the pubes. Diarrhœa also existed for two months, and, having ceased four days ago, the child became affected with convulsions and stupor, and next morning his arms, feet, and legs were œdematous. Is it not evident that the symptoms observed during the eight weeks which preceded admission, were those of a tubercular diathesis, and not the premonitory signs of encephalic inflammation? On Sunday, for the first time, spontaneous vomiting took place, and on Monday morning we produced the meningitic stain by pressure on the legs and arms, but we failed in obtaining it on the chest and head. The pupils were much dilated, and paralysis of the levator muscle of the eyelid existed; under the circumstances we asserted the presence of meningitis, and the child having died yesterday (Thursday), we now present to you the anatomical proof of the accuracy of our diagnosis. The membranes at the basis of the brain are thickened and opaline; tubercular granulations are present; the lungs are filled with strumous collections, and the liver is in a fatty state of degeneration. In order to test the value of the macula meningitica, we have tried to produce it in the twenty-two infants at present in our wards, under treatment for various complaints, and although we rubbed forty times the skin of those we do not suspect to be affected with meningitis, we failed in producing any thing but an *evanescent* redness—whereas one or two applications of the finger were amply sufficient to produce a *persisting* stain in the case of meningitis, in whom, besides a considerable degree of sensibility, may be noticed, contact appearing to produce in them pain, expressed by distortion of the features and a faint cry.

DAN. M'CARTHY, D.M.P.

Spain.

ANATOMICO - PATHOLOGICAL OBSERVATIONS UPON PHTHISIS.

By D. JOSÉ SECO BALDOR.

(Continued from page 5.)

CASE 3rd.—*Chronic Pleurisy; Miliary Tubercles in the Lungs; Acute Pneumonia and Bronchitis; Crepitous and Sibilous Râle.*

A man, of dark complexion, aged 29, possessing a sanguineous temperament and well-formed chest, was admitted into the Military Hospital of Lavapies, for gastric fever; from which he recovered in a few days. After a short convalescence, he complained, on the 30th of May, of cough and difficulty of respiration. Upon farther inquiry, it was found that he had suffered, at various times, from pains in the sides and other parts of the chest, and that, for three days, he had experienced cough, oppressed respiration, impaired appetite and evening-and-night fever. The expectorated matter was sanguinolent, frothy, viscid; pulse strong and frequent; skin hot and dry; face somewhat flushed; tongue moist; appetite extinct; thirst excessive. The sound of the thorax was dull in the inferior third of the right side; clear, in all other points: the respiratory murmur extinct in the inferior third of the right anterior region; perceptible and clear in the left axilla; but mingled with sibilous *râle* in the right sub-clavicular region, and in the lower third of the left side; and with crepitous *râle* in all the other regions of both sides. From these signs, might obviously be inferred the existence of acute pneumonia; resulting from exposure to the night-air. Blood-letting of twelve ounces; emollient cataplasms to the chest; rigorous abstinence; pectoral decoction, with syrup of gum (Acacia).

On the following days, the anti-phlogistic and revulsive plan was continued. After reiterated general and local abstractions of blood, two blisters were applied to the arms; and one to the breast. Yet the dyspnœa was aggravated; the cough became daily more obstinate and troublesome; expectoration more difficult and scanty; the sputa more viscid, and pulse quicker. The skin was constantly dry. The respiratory murmur receded, by degrees, from those points in which it had previously been mixed up with *râle*. The latter continued till death which took place on the morning of the 6th, preceded by a most painful struggle.

Necrotomy.—The whole surface of both lungs adherent to the contiguous parts, by bands and pseudo-membranes, thick, strong, and resembling, in their rugged aspect and reddish colour, those which are commonly met with in the inflamed pericardium. Their parenchyma obstructed by accumulated blood and serum; bleached and full of miliary tubercles, larger and more abundant in the circumference, than in the centre, of the organ. The hyperæmia did not reach the second degree, that of hepatization; for no portion of the lung sank in water. The bronchial mucous membrane, in many points, injected. The liver, stomach, and spleen, adherent to the diaphragm; but otherwise healthy.

Reflections.—In the first two cases, percussion and auscultation detected, with admirable precision, lesions which, without their aid, it would have been impossible to decide the existence of. These means of exploration were, however, not required, in the present case, to discover the inflammation of the lungs and pleura. Yet even here, they were useful; not only as confirming the indications afforded by the other symptoms, but rendering the diagnosis more precise by an exposition of the extent and degree of the pneumonic affection. In fact, the presence of the crepitous *râle* in nearly all the regions of the thorax, while indicating that both lungs were involved in almost general inflammation, shewed that the inflammatory process had not passed the first stage. Yet, with respect to the condition of the right lung, the author had been somewhat deceived: for the obtuse sound of the parietes, and the absence of the respiratory murmur in the anterior inferior part of the right side, led him to suspect hepatization of the inferior lobe, at least in its anterior portion. Both phenomena were, however, otherwise accounted for: the lung, pushed upwards by the pus, and confined by bands and pseudo-membranes, could not, when the fluid had been partly re-absorbed, recover its original volume; and the liver had occupied the vacancy consequently resulting in the pleura. The acute bronchitis, denoted by the sibilous *râle*, had left its traces in the body.

With respect to the pleurisy, there was no stethoscopic sign; but the pains in the breast sufficiently indicated its existence; and the lesions met with in the pleura, confirmed the report of the patient with regard to its long standing.

The numerous miliary tubercles disseminated through the substance of both lungs, ought not to be considered as of constitutional origin. The patient did not exhibit, either in his general health, or in the conformation of his thorax, any predisposition to phthisis. This, in fact, is one of those cases, in which the development of tubercles must be attributed to inflammation of the pleura; not only for the reasons already pointed out, but from the recent date of the tubercles compared to that of the pleurisy, and, finally, from their greater volume

and abundance in proportion to their proximity to the surface of the lungs, which had formed the seat of the chronic inflammation. The pneumonia and bronchitis were obviously too recent to have existed anteriorly to the tubercles; and, so far from having excited any influence upon their development, it is probable that the great extension which the pneumonia rapidly acquired, and its obstinate resistance to the vigorous treatment employed, resulted in part, from the pre-existence of the tubercles. The complete adhesion of the lungs to the contiguous parts, and the concealment of his relapse by the patient, with the view of escaping dietetic restrictions, perhaps contributed, also, to the unfortunate result.

CASE 4.—*Chronic Pleurisy of the Right Side; a Tubercle in the Inflamed Pleura; the Right Lung compressed, and pushed upwards, by the Liver, to the Fifth Rib: Ulcers in the small Intestine; Crude Tubercles between their Fundus and the Peritonæum: Dropsy of the Pericardium.*

A grenadier, ruddy, and of sanguine temperament, was admitted into the Hospital of Saint Isabel, with inflammation of the right pleura. From the man's statement, the affection was, at first, chronic; but had since become acute. By the employment of general blood-letting, leeches, blisters, pectoral potions and abstinence, the pain and fever were soon reduced; as also the obtuse sound emitted by the inferior half of the right side of the thorax (on percussion): and the patient became nearly convalescent. Nevertheless, the cough did not wholly subside; and, although eating well, he perceptibly lost flesh. The fever returned. The pulse became weak and very small: diarrhœa, with œdema of the lower extremities, supervened; and death, from exhaustion, on January 1st, 1837.

Necrotomy Twenty Hours after Death.—Thorax: Left pleura, and lung perfectly sound. The pulmonary and costal pleura of the right side, thickened and adherent. Right lung compressed from within, outwardly, and, from below, upwards; so that it reached only to the fifth rib. One tubercle in the right pleura; none in the lungs. About four ounces of transparent serum in the pericardium. Heart small and somewhat pallid. Left auricle small: right very large and filled with black fluid blood. *Abdomen:* Liver pale-coloured, voluminous, and reaching to the fifth rib. Jejunum and ileum exhibiting, in divers points, large ulcerations which comprehend the whole circumference of the intestine, except the portion adherent to the mesentery: between the fundus of these ulcers and the peritonæum, crude tubercles, considerably developed. Colon partially injected.

Reflections.—This patient was evidently the subject of pleurisy terminating in suppuration. The more fluid portion of the pus had been absorbed; and the liver occupied its place. The ascent of this organ, when the lung, after the absorption of the fluid contained in the right pleura, could not, in consequence of its adhesions, regain its pristine volume, is a fact of frequent occurrence, yet, hitherto unrecorded: and, no where, has the opposite case been mentioned,—that of the descent of the liver, consequent on the effusion of a large quantity of pus, or other fluid, into the right pleura. In the former case, the same ascent of this organ was observed; and there will be occasion to note its occurrence in other instances.

In the inflamed pleura, one tubercle was discovered; and divers others in the ulcerated portions of the small intestine, between the ulcers and the peritonæum. Here then, without doubt, the tuberculization was the result of the inflammatory process in the thorax and abdomen: for it would be absurd to regard a solitary tubercle of the right pleura as the cause of the pleurisy, and to overlook the connexion existing between the inflammation and the pus. With respect to the tubercles developed in the sub-peritonæal tissue, or rather between the serous and muscular membranes of the intestines, they may be reasonably attributed to the ulcerated condition of the mucous membrane. It is impossible to regard the tubercles as the cause of the latter; since, in none of them, had the process of softening commenced; and, consequently, they could not have produced ulceration. Here, then, is a fact completely hostile to the opinion of Laennec; who considers tubercles to be invariably independent on inflammation, and, in many instances, as the cause of that process and its consequences.

Lastly, it is interesting to mark the relation which existed, in this case, between the weak and almost imperceptible pulse and the small and pallid heart, compressed by an accumulation of four ounces of effused fluid.

[To be continued.]

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

BY G. J. GUTHRIE, F.R.S., &c.

LECTURE I.

Wounds and injuries of arteries; Structure of arteries; External coat — Internal — Middle; Fourth coat of Haller and Malgaigne; Efforts of nature in healing wounds of arteries; Effects of small puncture; A large puncture; Case of puncture of the ulnar artery by a medical student in bleeding a friend; Case of a tailor of the 40th regiment after the siege of Badajos; Effects of division of a large artery to one-third or one-fourth of its circumference; Case of a wound of the carotid by an arrow; Mr. Chamberlaine's case; Case in St. George's Hospital of stab in the thigh; Effect of a transverse opening in an artery—in man, in horses, and dogs; Complete division of an artery; Insufficiency of experiments in ascertaining the processes by which hemorrhage is suppressed; Effects of complete division on arteries of small dimensions; Case of soldier whose arm was shot off at Cuidad Rodrigo; Case of soldier whose leg was carried away at Salamanca by a cannon-shot; Contraction of extremity of the wounded artery; Effect of pressure on surrounding parts on wounded arteries; Division of arteries in amputation at the hip-joint; Division of femoral high up in the thigh; Case of thigh torn off by a cannon-ball; Probable result to the artery in such a case; Case at Salamanca; Processes in a somewhat smaller artery; Hemorrhage from lower end of divided artery; Processes of nature for closing the lower end of a divided artery; Effect of the collateral circulation; Appearances in lower end of artery; Case of a serjeant of the 62nd regiment at Toulouse; Case of a soldier of the German heavy cavalry; Conclusions to be drawn from these facts.

GENTLEMEN,—In commencing our inquiries into the subject of wounds and injuries of arteries, and the treatment and operations required for their cure, I shall detain you for a moment on that of their structure. In Great Britain anatomists usually consider them as composed of three coats:—1. A strong, fibrous, interwoven, dense, unyielding, external tunic, firmer within than without, and of a greyish-white colour. It may be destroyed by pressure, but does not tear or separate under the application of a silken ligature; it is especially elastic and retractile. 2. A fibrous, contractile, or pseudo-muscular layer, of a yellowish-red colour—more developed in the smaller arteries—less coloured in the larger, with fibres—are nearly circular, and united by others said to be oblique, or spiral; they are elastic to a certain extent, and eminently retractile and contractile. 3. A serous coat composed in the aorta of several layers. In the extremities it is a smooth and polished membrane, of a whitish-yellow colour, without fibres, soft and unctuous to the touch, of a dense, although partly transparent, structure, and readily torn in every direction by a slight degree of extension. These two last coats yield to, and are readily divided by a ligature applied to the artery with a moderate degree of force.

Baron Haller, and several of the later French anatomists, particularly Malgaigne, reckon the cellular substance which may be perceived in the aorta, but not in the pulmonary artery, between the middle and internal coats, as a fourth coat. They consider this part to be the principal seat of disease in arteries, and that to it the artery owes much of its elasticity. The structure of the external and the middle coats of an artery appears to be less dense in the female and in children than in the male, and although there is so general a resemblance between the arteries of man and of animals, as to render them apparently similar, their structure is not exactly alike. A second cellular coat, for instance, is found between the external and middle tunics in the ox. It has not been practicable to cause an aneurism in dogs, and the apparent similarity of these vessels, with reference to the effects, which may result from injury or disease, cannot be depended upon; nor can any confidence be granted to the numerous experiments which have been very cruelly made on animals with the view of elucidating the various processes which occur in man.

No reliance can be placed on the efforts of nature in healing a wound in an artery in man, although it does occasionally occur. They are not to be even expected after a secondary hemorrhage, which is very rarely effectively suppressed without the assistance of art.

A *small puncture*, made with a needle, will sometimes heal, as it generally does in dogs. I have, however, seen several instances in which the femoral artery was wounded by a tenaculum during amputation, and a secondary hemorrhage followed after ulceration, requiring the application of a ligature. A *larger puncture*, or a longitudinal slit of, from one to two lines in extent, does not commonly unite, except under pressure, although the edges of the wound may not always separate, so as to allow blood to issue in any quantity. It sometimes only oozes out, and occasionally does not do even that, unless some obstacle to the circulation takes place below, when blood is propelled with a jet; and the edges of the cut having once been separated, blood continues to be thrown forth in considerable quantity. When the bleeding is suppressed by pressure made on the artery above, and all causes of obstruction are removed from below, the edges of the little wound approximate, and the circulation through the wounded artery may be, and often is carried on for several hours without further hemorrhage, when it may again recur without any obvious cause. In an artery of the size of the temporal a longitudinal slit may sometimes heal without the canal of the artery being obliterated, although this very rarely takes place in one of a large calibre.

In all cases of punctured wounds of small arteries, and particularly when the bleeding has ceased by artificial means, and pressure can be effectively made, and especially against a bone, it should be tried in a graduated manner over the part injured, in the course of the artery above and below the wound, and over the whole limb generally, the motions of which should be effectually prevented, and absolute rest of the whole body enjoined, if the artery is of any importance. This should be continued for two, three, or more weeks, according to the nature of the injury, and for some time after every appearance of recovery has taken place, in order to aid in the consolidation of the parts filling up the opening in the artery.

CASE 1.—A medical student, being desirous of bleeding his friend in the arm, opened the ulnar artery which in this case was very superficial. On discovering the error he had committed, he closed the wound in the skin, and applied a firm compress and bandage, under which it healed, and the edges of the cut artery seemed to be in apposition, as little or no blood had escaped between them. On applying the ear to the part, it sounded like an aneurism, although there was no tumour, the thrilling sound being apparently occasioned by friction against the cut edges of the inside of the artery. This thrilling noise gradually diminished, and was lost as the artery became impervious. The vessel immediately below the wound gradually recovered its pulsation, except at the exact situation of the injury, where none could be distinguished. I have seen the same thing occur in wounds of both the arteries near the wrist, from punctures of a similar size, and I have reason to infer that it has taken place both in the axillary and the femoral arteries.

CASE 2.—The master tailor of the 40th regiment, tempted by the approaching prospect of plunder, was induced, on the night of the assault on Badajos, to give up the shears, and arm himself with the halbert, and was properly rewarded for his temerity

by a wound from a pike in the right arm, from which, he says, he bled like a pig, and became very faint. On his arrival at the spot indicated for surgical assistance he fainted, but this was attributed to the unwarlike propensities of the man, rather than to any sufficient cause. The wound was not more than one-third of an inch long, a little below the edge of the pectoralis major, and immediately over the artery. The arm and hand were numb and cold; the pulse was not distinguishable at the wrist, and it appeared to cease at the place of injury, which was harder and a little more swelled than natural. He said that his pulse had always been felt by the doctors in the usual place. I took him into my house to watch the case, and the wound healed without any trouble, attention being had to keeping the arm warm by covering. On the 1st of May the pulsation of the artery could be felt a little below the wound, and on the 6th it was distinguishable along the lower edge of the biceps. On any exertion he had a good deal of unpleasant numbness in the thumb and forefingers. A small cicatrix formed at the place of the wound, which was otherwise quite natural to the touch. The median nerve may have been injured; that the artery was wounded there can be no doubt, and that it healed without the least assistance from art, although it became impervious at the part injured. This case proves that when a large artery is wounded in man by a sharp cutting instrument, to a certain but moderate extent, the process of cure takes place through inflammation, and by the obliteration of that part of the canal of the vessel. Continental surgeons, and especially the French, have sacrificed whole hecatombs of animals to prove this fact, which had been so many years before recorded in England.

It has not been satisfactorily proved in man that a large artery, such as the femoral, has been opened to the extent of one-third or a fourth of its circumference, and that the wound has healed without the canal becoming impervious. Two such cases are stated to have occurred in the 23rd vol. of the *American Journal of Medical Sciences;* but as the pulsation distinguished in the lower part of the vessel was not perceptible in the first instance, and was only felt after a little time had elapsed, I am disposed to apprehend that dissection would show an obliteration of the canal in each, at the point injured, although it might not be for more than the eighth of an inch in extent. A *small wound* of a large artery may close without obstructing the canal of the vessel, but the part is not so firm or solid as before, and may yield, and give rise to an aneurism, having apparently the characters of a small true, as opposed to the spurious diffused or even circumscribed swelling, which more usually follows a similar accident.

CASE 3.—Colonel F. was wounded by an arrow in the right side of the neck, opposite the bifurcation of the carotid, which caused a considerable loss of blood at the moment. The wound healed, leaving only a mark where the point of the arrow had entered. Some time afterwards he observed a small swelling at the part which, from its pulsation, was declared to be an aneurism. He therefore showed it to Sir A. Cooper, who advised his doing nothing, as it did not increase. Uneasy about it, he asked my opinion at Badajos after the siege. It had not increased, but it caused him some anxiety, and I promised to place a ligature on the common carotid as soon as the campaign was over if it should increase in size. It did not do so, and nothing was done, he being killed in action the year afterwards.

In cases of this kind, and in that of Mr. Chamberlaine's, of Jamaica, in which he tied the axillary artery for an aneurism after a punctured wound to be noticed hereafter, the disease in the vessel seemed to be confined to the part wounded, and to be in reality a true aneurism, from the inner coats not having united firmly, and from the outer coat although united or healed having lost its elasticity, and become dilated—an effect which will, in all probability, follow an injury of an artery, when the obliteration of the canal does not take place. The wound in the artery may communicate with a vein.

CASE 4.—Mr. Keate and Mr. C. Johnson have under their care in St. George's Hospital at present, a young man who received an injury from a knife, on the 28th of October, 1845, as nearly as possible in the inside of the middle of the right thigh, which bled profusely, until he fainted. The wound was then closed, and secured by compress and bandage for between two and three weeks, when on their removal it was found to be healed, but a small pulsating tumour had formed, for which he was sent to the hospital. This was manifestly an aneurism, but from the peculiar thrill it communicated to the touch, and which could be distinguished even above Poupart's ligament in the femoral and iliac veins, it is believed to be a *varicose aneurism*, which is said to be formed when the artery and vein have been both opened, having some cellular membrane as a means of communication between them, and through which the blood is propelled from the artery into the vein. When the blood is propelled directly into the vein so as to enlarge it, the complaint is called an *aneurismal varix*. The man being in bad health all operative methods were considered improper, and under a light but well regulated pressure on the part, the tumour is diminishing in size, is firmer to the touch, the thrill and sound are certainly less marked, and a cure may be effected, although in these cases it rarely occurs without a ligature being placed above and below the opening in the artery.

When an artery in man is cut *transversely*, or to a fourth of its circumference, it forms a circular opening as in animals, and if the artery be large the bleeding usually continues until the person faints, or it is arrested by pressure. The difference between arteries in man and in animals is here strongly exemplified. In dogs the bleeding commonly ceases without any assistance from art, and without the animal being exhausted; in horses and sheep they usually bleed until they die; whilst in man, even with the best aid from compression, hemorrhage will in all probability recur, unless the circulation be altogether stopped. If the external opening only should be closed, a spurious, circumscribed aneurism will be the consequence in so small an artery as the temporal, and I have often been obliged to lay open, and sometimes to apply a ligature above and below a little aneurism of this description. When it has been of a smaller size I have merely divided it transversely, and applied pressure; but there is some danger of the pressure becoming deranged, and of a return of the hemorrhage. In a larger artery the spurious aneurism may or may not be diffused.

When an artery is *completely divided*, it is less likely to continue to bleed than if it had been only wounded, and a variety of opinions have been entertained as to the means employed by nature, as well as by art, for the suppression of the hemorrhage.

In my work on the Diseases and Injuries of Arteries I have quoted the opinions of the most esteemed authorities—on the means employed by nature for the suppression of hemorrhage—from Celsus, Rufus, Galen, and Ætius down to Dr. Jones, the latest and most important of all. The methods they generally adopted appear to me to have been insufficient for and unequal to the object in view. They bled an animal until he died, and then reasoned on the manner or means by which the bleeding was suppressed, when it was in fact arrested by death. It is only when nature has not been interfered with, and the patient has not died from bleeding continued to the last moment, but has on the contrary lived some time after the hemorrhage has ceased, that the processes by which its suppression has been accomplished can be fairly investigated. These processes essentially depend on the size and variations of structure in an artery. They are dissimilar in large and small arteries, and not even quite alike in the upper and lower ends of the same artery—facts which were elicited from observations made on man on the field of battle during the Peninsular war, and consequently not liable to error.

Arteries of moderate dimensions, such as the femoral or axillary, tibial or brachial, and particularly all below these in size, are capable by their own intrinsic powers when completely divided, of arresting the passage of the blood through them without any assistance from art, or from the surrounding parts in which they are situated. This fact overthrows at once the whole theory which relates to the importance of and necessity for the sheath of the vessel, and the offices it performs in suppressing hemorrhage; and in a great measure, to that supposed to be derived from the formation of an external coagulum, the *bouchon* of the French.

CASE 5.—A soldier who had his arm carried away by the bursting of a shell at the siege of Ciudad Rodrigo, was brought to me shortly afterwards. The axillary artery becoming brachial, was torn across, and hung down lower than the other divided parts, pulsating to its very extremity. Pressed and squeezed in every way between my fingers in order to make it bleed, it still resisted every attempt, although apparently by the narrowest possible barrier, which appeared to be at the end of the artery, and formed by its contraction. The orifice of the canal was marked by a small red point, to which a very slight and thin layer of coagulum adhered, the removal of which had no influence on the resistance offered by the very extremity of the artery to the passage of blood through it. In this, and in another instance of a similar nature, I cut off the end of the artery at less than an eighth of an inch from the extremity, when it bled with its usual vigour. In both, the vessel for near that distance was contracted so as to leave little or no canal at its orifice, which in those cases was filled by a coagulum of the size and shape of a very small pin.

CASE 6.—During the battle of Salamanca a soldier was brought to me whose leg had been carried away by a cannon-shot. I found the posterior tibial artery pulsating to its extremity in a similar manner. As he had lost a considerable quantity of blood, and was much discouraged, I did not try to make it bleed, but amputated the leg forthwith, and examined the artery afterwards. I have had many opportunities of seeing the same thing, and therefore assert that it is in the very extremity of the cut artery that the power or means of suppressing hemorrhage resides after the vessel has been divided. In many cases of amputation, in which I wished the patient to lose a certain quantity of blood, I have allowed an artery to bleed until it ceased. The jet in such cases appears to be propelled at first irregularly, or by jerks, the stream then becomes continuous, although acquiring a little impulse from each contraction of the heart. As the orifice contracts, the flow of blood becomes more equal, it is thrown to a less distance, the size of the stream is smaller, and it goes on diminishing until at last the blood only oozes out, and by the time it ceases altogether to be discharged, the extremity of the vessel is covered by a thin layer of coagulum, which is readily removed from it. In many cases in which I have examined the parts after death or after amputation, in consequence of disease below the injury of the artery, this contraction of the vessel was evident, as well as the formation of the very thin layer of external coagulum, extending like a fine red thread into the canal of the artery. The sheath of the artery could, in the cases related, do nothing, because it was carried away—it was not present—neither did the internal coagulum, on which so much stress has been laid, because at this period, strictly speaking, it does not exist.

In small vessels, such as the radial or ulnar arteries, little depends on the diminished power of the circulation; but when the axillary or femoral artery is divided, the shock of the injury and the loss of blood, powerfully contribute in the first instance to the suppression of hemorrhage, by subduing if not momentarily arresting the action of the heart. Having thus established the fact by observation and experiment on man, that arteries in the extremities of the second order in regard to size, will cease to bleed through their own efforts, unaided by the assistance of the surrounding parts, I am far from intending to imply that no assistance is ever given by the surrounding parts when the femoral artery is cut across high up. When an artery of this size is divided in situ, and retraction has taken place, the wound in the limb being small and not direct, the assistance is oftentimes considerable, although it is only auxiliary by retaining the coagulated blood in its place against the ragged orifice of the contracting vessel. If the axillary artery be laid bare previously to an operation for amputation at the shoulder, and the surgeon take it between his finger and thumb, he will find that the slightest possible pressure will be suffi-

cient to stop the current of blood through it. Retaining the same degree of pressure on the vessel, he may cut it across below his finger and thumb, and not one drop of blood will flow. If the artery is fairly divided by the last incision which separates the arm from the body, without any pressure being made upon it, it will propel its blood with a force which is more apparent than real. All that is required to suppress this usually alarming gush of blood, is to place the end of the forefinger directly against the orifice of the artery, and with the least possible degree of pressure consistent with keeping it steadily in one position, the hemorrhage will be suppressed. It is more important to know, that if the orifice of the artery from a natural curve in the vessel, or from other accidental causes, happens at the same time to retract and to turn its open orifice a little to one side, so as to place it in close contact with the side or end of a muscle, the very support of contact will sometimes be sufficiently auxiliary to prevent its bleeding.

In amputation of the hip-joint, the femoral, and profunda arteries are usually divided at, or just below the origin of the latter, and bleed furiously if disregarded; but the slightest compression between the finger and thumb stops both at once. They never have given me the smallest concern in these operations, or others of a similar nature, and I have learned to hold all arteries that can be taken between the finger and thumb in great contempt. It is quite impossible for a man to be a good surgeon—to do his patient justice in great and difficult operations attended by hemorrhage unless he has this feeling—unless his mind is fully satisfied of the truth of these observations. Whilst his attention ought to be directed to other important circumstances, it is perhaps absorbed by the dread of bleeding, by the idle fear that he will not be able to compress the artery and restrain the bleeding from it—that he may have half a dozen vessels bleeding at once—that his patient will die on the table before him. Once fairly in dismay, and the patient is really in danger; but, endowed with that confidence which is only to be acquired through precept supported by experience, he surveys this scene with perfect calmness; taking the great artery between the finger and thumb of one hand, he places the points of all the other fingers of both if necessary, on the next largest vessels; or he presses the flaps or sides of the wound together until his other hand can be set at liberty by an assistant, or in consequence of a ligature having been passed around the principal artery. I admit that this is a scene sufficient to try the presence of mind of any man; but he is not a good surgeon who is not equal to it—who does not delight in the recollection of it when his patient is in safety, and his recovery assured. I have seen many persons die on the table under great operations. I never lost one from hemorrhage, except in one instance in which a tourniquet was applied. It was with no small satisfaction I heard a gentleman some six months ago, publicly state in the board-room of the Westminster Hospital, that the surgeons of another hospital to which he was especially attached, never used a tourniquet in amputation, and declare it to be an indication of their superiority over those who did resort to it for assistance. Joining most cordially in the approbation thus bestowed, I could not but feel gratified in recollecting that I was the first who publicly taught this method of proceeding; and it must be highly satisfactory to those governors who take an interest in the character of the Westminster Hospital to know that it was under their auspices and in their hospital it was first practised in London. It was in consequence of this recommendation that my old friend, Sir Charles Bell, whose loss to science cannot be too much regretted, represented me seated on a pack-saddle on the back of a bourro (*Anglice*, a jack-ass), on the top of the Pyrenees, expatiating on the merits of these barbarous proceedings to the descendants of the Bearnois of Henri Quatre with one hand, and to the children of the lieges of Ferdinand and Isabella with the other.

When the femoral artery is *cut across* in the upper part of the thigh, whether it be done by a cannon shot, a musket ball, or a knife, the patient does not always bleed to death at once, although he frequently dies after a time in consequence of the shock and the loss of blood. He is less likely to die if the artery is divided in the middle or lower half of the thigh, but in both cases it is probable the hemorrhage will cease of itself. If it should recur, it will be more likely to take place from the lower than the upper part of the artery, on account of the different process adapted by nature in these cases—facts, the knowledge of which we also owe to the war in the Peninsula.

Case 7.—At the battle of Toulouse, a large shot struck an officer and two men immediately behind him, and nearly tore off the right thigh of each. The artery was divided about, or less than three inches below Poupart's ligament. I saw him shortly afterwards in consequence of his surgeon saying it was a case for amputation of the hip-joint. The pulse was feeble, the countenance ghastly, bedewed with a cold sweat, and with every indication of approaching dissolution. The house being at an advanced point, and close to one of the French batteries, the fire of round shot and musketry was so severe upon and around it, as to induce me to remain until the battery should be taken by the troops then advancing upon our flank. In order to occupy my time usefully, I returned to the officer, and found he had just expired. Desirous of seeing by what means the hemorrhage had been arrested, I cut down upon the artery, took it carefully out, and found that its divided end was irregularly torn; a slight contraction had taken place just above, but not sufficient to have been of the slightest utility in suppressing the bleeding, which was in fact prevented by an external coagulum which filled up the ragged extremity of the vessel, and which in a few days would have been removed with the purulent discharge. The orifice of the artery, and the surrounding surface for at least an inch in extent would then be covered by a yellowish green-coloured matter, very distinct in appearance from the natural structure, and so strongly marked as to point out the situation of the extremity of the artery.

Case 8.—At Salamanca I had the opportunity of examining the thigh of a French soldier, whose femoral artery had been divided perhaps even higher up by a cannon shot. He lived until the next morning when I saw him, no operation whatever having been attempted, nor a tourniquet applied. He died exhausted, but not from any immediate bleeding, which when once stopped had not returned. The artery was in a similar state to the preceding one, with this slight difference, that the orifice was a little more contracted, the external coagulum filled up the ragged end of the artery, and was slightly compressed within by the contraction which kept it in its place. The rest of the coagulum filled the hollow in the surrounding parts which the retraction of the artery had occasioned. In this case, so unlike those I have hitherto noticed, the first natural cause giving rise to the suppression of the bleeding was the diminution of the power of the heart; the second the formation of a coagulum in the hollow of the sheath left by the retraction of the artery. Contraction had begun, but had done nothing essential.

If a case of this kind should survive, and the hemorrhage should be ultimately restrained by natural causes, I am led to surmise from what I have seen in the artery a little lower down, that the continued contraction which occurs in a circular direction just within the rugged or torn end would gradually lead to the protrusion of the external coagulum, projecting into its canal, like a mamillary process—an operation which would be assisted by the lymph or fibrin poured out from within and around the artery.

In other instances in which I have examined the extremities of such large arteries when divided, the appearances have been more or less of a similar nature; unless where the persons had died immediately, when the torn extremities were found quite open and with little surrounding coagulum.

The processes of nature are different in an artery of a somewhat smaller calibre. When the femoral artery has been fairly divided in the middle or lower part of the thigh, the patient has, in almost all the cases which have come under my observation, either died without assistance, or the hemorrhage has ceased spontaneously. Having been arrested for twelve hours, the efforts of nature are usually sufficient to prevent its return from the upper, although not from the lower end of the vessel; but then it is of venous and not of arterial colour—a fact now acknowledged to be of the greatest importance. The great evil to be dreaded in such cases, is not from hemorrhage from the upper end of the divided artery, but from the lower, and from mortification of the foot, which circumstance I shall notice in its proper place.

The upper end of an artery retracts on being divided, and this retraction is accompanied by a contraction of the cut extremity of the vessel, which assumes the shape of the neck of a French wine-bottle or Florence oil-flask. The contraction is confined in the first instance to its very extremity, so that the barrier opposing the flow of blood is formed by this part alone. The contraction goes on, however, increasing for the space of an inch, which is usually filled up with an internal coagulum, of a round pyramidal shape, adhering firmly to the contracted end of the artery, loose at its apex, and extending frequently as far as the first collateral branch, but rarely under any circumstances beyond two inches; the very orifice of the artery on the outside being in a few days covered by the yellowish green-coloured matter I have already alluded to. Some of these processes are continued even after the external wound has healed; the artery goes on diminishing and contracting as far as it is useless, so that of four or five inches, from one to two may be impervious, the remainder being contracted although still permeable by a probe. An accompanying nerve where there is one would do the reverse, the cut extremity would be enlarged or bulbous, gradually diminishing as it is traced upwards, until it becomes of its proper size.

The processes adopted by nature for closing the end of the lower extremity of an artery of the size of the femoral at the inferior part of the thigh, are different from those employed at the upper or opposite extremity. The retraction or contraction of the lower end of a divided artery is neither so perfect nor so permanent as at its upper end, and the small internal coagulum is in many instances altogether wanting or very defective in its formation. The closure of the lower orifice being less perfectly accomplished than the upper, it is the most likely to suffer from secondary hemorrhage, which may be distinguished from that from the upper end of the artery at an early period after the accident, by the venous colour of the blood, and from its flowing or welling out in a continuous stream, as water rises from a spring, and not with an arterial impulse.

The retracting and contracting powers in the lower end of a divided artery are, nevertheless, considerable, and are sufficient in some cases to nearly close the lower end of the femoral artery when divided by amputation above the knee. When the femoral artery is cut across, the lower portion of the vessel is emptied by its last efforts, combined with the action of the capillaries. When the collateral circulation is powerful, blood soon regurgitates into the artery, but the force of the regurgitation can be in no proportion to that of the propulsion at the other or upper divided end of the vessel, which will generally be able to resist this impulse; whilst the lower one oftens opens and bleeds after the lapse of a few days. In all the cases I have had an opportunity of examining, in which hemorrhage had taken place from the lower end of the artery, the following appearances were observable after the lapse of a few days:—

The same kind of yellowish-green matter marks and conceals the situation of the lower extremity of the artery as it does the upper. It is however thinner where it immediately covers the end of the artery, which in none of these cases is contracted in the conical manner described as taking place in the upper extremity. On the introduction of a probe with the greatest gentleness into the artery from below, it usually makes its appearance at a point on the yellow space, raising a thin portion as it protrudes. On laying open the artery, the orifice would seem to have been once closed by this layer of fibrin, but with a less degree of contraction than the upper end of the same artery; the layer still however forming an obstacle sufficient to cover and close three-fourths of the orifice, the blood having flowed through the remaining fourth, which had probably given way by accident. The following

case is illustrative of the several points alluded to.

Case 9.—Serjeant William Lillie, of the 62nd regiment, aged thirty-two, was wounded in the right thigh, on the 10th of April, at the battle of Toulouse, by a musket-ball, which passed through, in an oblique direction downwards and inwards, close to the bone, describing a track of seven inches. The ball was extracted behind on the field. He said he had bled a good deal on the receipt of the injury, which he had stopped by binding his sash around the limb. The discharge from the wound was considerable; it appeared, however, to be going on well until the 20th of the month, when, on making a sudden turn in bed, dark coloured blood flowed from both orifices of the wound in considerable quantity. I had given an order as chief of the medical staff in Toulouse, that no operation should be performed on a wounded artery without a report being sent to me, and an hour at least granted for a reply, unless the case were of too urgent a nature to admit of it. It appeared to be so in this instance, and before I arrived Mr. Dease had performed the operation for aneurism at the lower part of the upper third of the thigh. I could only express my regret that it had been done, and point out the probability of the recurrence of the hemorrhage from the lower end of the artery, which took place on the 7th of May, when the limb was amputated, and the man died. On examination the artery was found to have been divided exactly where it passes between the tendinous expansion of the triceps and the bone. The upper portion of the artery thus cut across was closed. A probe introduced into it from above would not come out at the face of the wound, although the impulse given to this part on moving it was observable in the middle of a large yellowish-green spot, which I had previously declared to be the situation of the extremity of the artery, which had contracted behind this, in the shape of a claret-bottle for about an inch, having within it a small coagulum. The lower end of the artery from which the hemorrhage had taken place was marked by a spot of a similar character; but on passing a probe upwards from the popliteal space, it came out at a very small hole in the extremity of the artery, in the centre of the yellow spot, the canal of the artery not being contracted and diminished, but only apparently closed by a layer of the yellowish-green matter laid over it, and adhering to its circumference.

Case 10.—A soldier of the German heavy cavalry was wounded nearly in a similar manner at the battle of Salamanca, and died in the night, some days after the injury, from inattention. The appearances were nearly the same, and I have had so many opportunities of verifying these points, that I do not hesitate in considering the following as three important facts, first demonstrated and proved during the war in Portugal, Spain, and France, and that nothing has since occurred to impeach their accuracy.

1. That an artery as large as the femoral is capable, when divided, of taking on certain processes, which will cause a suppression of hemorrhage from its upper end, and which suppression is usually permanent.

2. That the bleeding from the lower end of the same vessel is less certainly and less permanently restrained, and not by exactly similar processes; the blood issuing from the lower end of the femoral artery being for the first few days of a venous colour. It is less so from the axillary artery, in consequence of the collateral circulation in the upper being more free than in the lower extremity, and the change of colour is sometimes not perceptible in the smaller arteries of the forearm, although it is generally so in those of the leg.

3. That this bleeding from the lower end of the vessel, which is more or less of a venous colour, and issues in a continuous stream, may be restrained by compression properly made on, and in the course of the lower part of the wounded artery; but that in no instance should recourse be had to a ligature on a distant part of the artery above the seat of injury, until every other possible effort to arrest the hemorrhage has failed.

Apothecaries' Hall.—Professor Brande will commence his Course of Lectures on Friday, May 1.

A Course of Lectures on Hernia,

By JOHN FLINT SOUTH, Esq.,

Surgeon to St. Thomas' Hospital, and Professor of Surgery to the Royal College of Surgeons.

(Delivered in the Theatre of the College, and revised by the Professor for the Medical Times.)

Lecture II.

General observations on irreducible or incarcerated ruptures:—Symptoms; Causes of incarceration; Most common forms in which incarcerated hernia occurs:—Treatment of incarcerated hernia; Suspension; Pott's observations; Liability of incarcerated hernia to become strangulated; Pott's observations:—Is it possible to do anything for the return of incarcerated hernia? Cloquet's opinion; Views of Hildanus, Le Dran, Pott, Hey of Leeds, and Arnaud; Remarks of Petit and Schmucker; Review of opinions by Professor South.

General observations on strangulated ruptures:—Definition; Symptoms; Cause of the vomiting; Flatulence; Tightness in the midriff; Dragging at the pit of the stomach; Tenderness of the abdomen; Tympanitis; Wiry pulse; Peritonitis; Hiccough; Sunken Countenance; Swelling soft and doughy; Death.

General Observations on Irreducible or Incarcerated Ruptures.

Symptoms.—A swelling capable of increasing size or dilatation by the mere effort of coughing, sneezing, or any more violent exertion, is equally a sign of incarcerated, as it is of reducible rupture, but the distinction between them is that the latter returns, or can be returned into the belly, whilst the former remains permanently in the rupture-sac, and neither returns nor will be returned into the belly. It may be, indeed, that more bowel is in the sac at one time than at another, owing to some accidental cause, and consequently that this moves in and out of the sac; but a certain portion never leaves it, yet, although thus retained, it does not ordinarily interfere with the functions of the alimentary canal, and therefore produces no more constitutional disturbance than if it were reducible.

A rupture may become irreducible or incarcerated, when of long standing and great size, from the circumstance of the cavity of the belly being too small to receive it. The person not having worn a truss, or one which was insufficient for the purpose, the pressure of the abdominal muscles, under common exertion, upon the bowels, gradually forces more and more of them into the rupture-sac, which, having no muscular covering of sufficient strength to oppose their admission, and in most instances no muscular covering at all, yields, and increases in size in corresponding proportion to the escaping bowel, which, finding itself freed from any pressure of consequence, soon accommodates itself to its new situation; whilst the cavity of the belly not merely is diminished by the contraction of the muscles, which becomes permanent upon the lessening quantity of the still naturally remaining bowels, but also by a continual departure of more and more of the peritoneal lining of the muscular cavity of the belly, through the opening of the rupture, for the enlargement of its sac. Hence, in large ruptures, which are perfectly unattached to their sac, it is impossible to return them, because the abdominal peritoneal cavity is not sufficiently capacious to receive them; consequently they must be included among incarcerated ruptures. A rupture may become irreducible or incarcerated by fibrinous bands stretching from one part to another of the interior of the sac, and so entangling without constringing it, that it cannot return into the belly. Or, gut may in like manner be entangled in omentum, which has descended with it, either in a coil which has accidentally got round it, or by bursting through the protruded omentum. Or the rupture sac itself may burst, and the bowel escaping through it may be then confined and unable to return. But the most common cause of incarceration is adhesion between the rupture-sac itself and the peritoneal covering of the protruded bowel, which usually results from the pressure made on them by an ill-fitting truss, and irritates sufficiently to excite a slow inflammation, by which the bowel and sac are united more or less completely. These adhesions vary in length according to the time they have existed, the peristaltic movements of the bowel constantly pulling on and tending to lengthen them.

Another cause of incarceration is to be found in the growth of the protruded part after it has established itself in the sac. This especially applies to the omentum, which, from the comparative bulk of the part in the sac, with that at the mouth of the sac, cannot be explained any other way.

Umbilical is the most common of irreducible or incarcerated ruptures, in consequence of its more frequent original existence; and next to it femoral rupture in women, as they too frequently, from mistaken ideas of modesty, conceal their disorder, and, employing no remedy, allow the protruded bowel to remain constantly down, under which circumstances adhesions of omentum frequently occur.

Treatment.—In the majority of cases, the only treatment employed is the support of the rupture, and the prevention, as far as possible, of its increase, both which objects are at once effected by a suspensory bandage which should lace so as to fit well, and produce equal pressure, or by a truss having a cup, in place of a pad, corresponding in size to the swelling, according to the part at which the rupture is situated.

Pott, in speaking of the large collections of fluid frequently noticed in old omental ruptures which have been only suspended by a bag truss, says, "the fluid is seldom so much in quantity as to occasion any particular attention to it; but, on the other hand, it sometimes is so much in quantity as to become an additional disease to the original one. He had, therefore, more than once been obliged to let it out, in order to remove the inconvenience arising from its weight, and the distension of the scrotum, which he had also seen become gangrenous by the neglect of this operation." Such occurrences, I apprehend, are very rare, and unless gangrene existed, I should not be disposed even on Pott's high authority to open the sac and draw off the water, for fear of the inflammation which might attack the sac, spreading to the general peritoneal cavity. Although an incarcerated rupture does not usually produce any constitutional disturbance, yet must it be always considered as predisposing to strangulation, and, therefore, is of more consequence than one which is reducible. Upon this point I cannot do better than quote Pott's observations. "It is fit" says he, "that mankind should be apprised, that the quiet, inoffensive state of this kind of hernia is by no means to be depended upon; many things may happen to it, by which it may be so altered as to become hazardous, and even fatal. An inflammation of that part of the gut which is down, any obstruction to the passage of the aliment or fæces through it, or a stricture made by the abdominal tendon, either on what has been long down, or on a new portion which may at any time be added to it, is always capable of so altering the state of the case as to put the life of the patient in danger. Indeed, the hazard arising from a stricture made on a piece of intestine contained in the sac of an old irreducible hernia, is in one respect greater than that attending one that has been found at times reducible; since, from the nature of the case, it will hardly admit of any attempt towards relief but the operation, and that in these circumstances must necessarily be accompanied with additional difficulty."

The possibility of the occurrence of such serious conditions in cases of irreducible incarcerated rupture renders it a very natural question, whether it be advisable to do any thing for their return. If the bowel be either entangled by bands or the gut by the accompanying omentum, or if the bowel have contracted adhesions to the sac, no treatment will be serviceable; nor do I believe, as Cloquet affirms, that there may be a spontaneous cure by the retraction of the peritoneal sac into the belly, which, if the rupture be of large size and long standing seems to me utterly impossible. But when the bulk of the swelling is omental, treatment which is more specially directed to the diminution of its size may occasionally be successful. Pott quotes from Hildanus the case of a man who was radically cured by six months' confinement to bed, in the case of a rupture of twenty years' date. And Le Dran says, "I have seen the late M. Arnaud reduce several

of these herniæ of long standing, and keep them so; and I have known the patients live many years afterwards in good health, and free from those accidents that might have been apprehended. The reason of this success was that the precautions he took to facilitate the reduction conduced also to the preservation of them from those accidents that might have happened after the reduction was made. These precautions consist in confining the patient for a fortnight or three weeks to his bed, during which time he is to live entirely on soup and broths, and even of those in such quantity only as to prevent inanition. It would be proper, likewise, he should be blooded three or four times, according to the ulness of his constitution, and have his body kept open with gentle purgatives. By these means his strength being diminished, the parts become more pliable, and the whole body being emaciated, the size of the mesentery and epiploon is likewise lessened, whose bulk was the principal obstacle to the reduction. It is then more easy to replace the parts in their natural situation, which being once done, there is no great difficulty in keeping them there." The latter part of Le Dran's proceeding is, to use a common observation, much more easily said than done, as the mouth of the sac still remaining little, if at all, diminished, and the part in which it is, being very lax from the general emaciation. But little effort will be needed to reproduce the rupture. "This method," says Pott, "has now and then succeeded, and in some cases is worth the trying, but previous to the attempt, there should be one circumstance which makes success probable, and there should also be good reason to believe that the habit and age of the patient will bear the necessary confinement and evacuation; otherwise, though he should get rid of his rupture, he may be much worsted by the experiment. If such attempts succeed," he observes, "a truss should be immediately put on, and worn constantly without remission; for in these people the largeness of the abdominal aperture, the thickness of the hernial sac, and the relaxation of the mesentery, make a new descent always to be apprehended and guarded against." Hey, of Leeds, followed Arnaud's practice, and has mentioned several successful cases in his Practical Observations on Surgery.

But if the return of a rupture, incarcerated by its size, can be thus effected, yet it appears to be questionable whether it be prudent to replace a large rupture, though it may be returned without much difficulty. Petit justly observes, "it is always dangerous to return into the belly a large quantity of parts which have been long in a rupture, whilst the belly, as it may be said, has accustomed itself not to contain them; so that, when returned to their original place, they are, as it were, foreign to it. And this is not the least, I have seen a person die after the reduction of a large rupture by the taxis alone; he had inflammation of the whole belly, and many intestines were gangrenous; after the reduction he had symptoms of strangulation, although no strangulation existed." "In another patient, who had an omental rupture of considerable size, it was reduced without much effort, I might even say with readiness, although for six weeks it had not returned. The patient could not bear the bandage applied, but pulled it off immediately as nausea, and afterwards vomiting, ensued. He complained of dull pain over the whole belly, accompanied with so great degree of oppression, that, not doubting these were caused by the reduction of the parts, attempts were made to reprotrude them, but in vain; neither the vomiting nor supervening convulsions could force them out. At last inflammation of the whole belly, fever, and pain, became so severe that he died after forty-eight hours of suffering. On opening the body, we found all the parts of the belly inflamed and almost gangrenous, the portion of omentum which formed the swelling, like a pad resting on the edge of the sac, the aperture of which was closed by peritoneal inflammation." That the reduction of the rupture was, in these cases, the cause of death, and that in neither instance was it accidental, is proved by Schmucker's observation of a man of two-and-thirty years old, who from youth had an inguinal rupture, but which, having been neglected, had become of immense size, the abdominal ring very large, and the abdominal muscles exceedingly contracted. After purging and low diet, on the afternoon of the tenth day, he reduced the rupture with much trouble, because the abdominal muscles would not yield, and applied a good truss; he was directed to take cream of tartar, and have the belly rubbed with oil, and keep in bed. I had not yet left him, when he cried out that he could not long bear it, as it was as painful as if the belly would burst. I encouraged him with the hope that it would soon be otherwise, but, on the following morning, he assured me he had suffered such pain during the night that he would have the bandage removed. The oppression, however, increased, so that he almost fainted, and could scarcely breathe. I ordered an analeptic potion, drew up his knees, and raised his head and chest so as somewhat to diminish the tension of the belly; this was continued, but in the evening I found him almost at the last gasp. The pulse was small and scarcely to be felt, the face covered with cold sweat, and the patient and his friends earnestly begging me to remove the truss; I at last consented, as I saw that, under present circumstances, it was impossible he could bear it any longer, that his friends would remove it, perhaps with carelessness, and that then the intestines might protrude violently and cause mischief. I therefore loosened the bandage, put my left hand between the part and the rupture, and allowed it gradually to descend; scarcely had a bit of it escaped, when the patient again breathed, and after a quarter of an hour the rupture was as large as ever, and the patient again brisk and well."

The recital of these interesting cases proves the danger of returning large old ruptures into the belly, which is unfit to receive them, as well from its insufficient capacity as from the resistance which its muscular walls offer, and shows that the best treatment is simply to support and prevent the enlargement, as far as possible, of the rupture, by a well-fitting suspensory bandage. The starving and recumbent system will, indeed, in time permit the return of the rupture, if it be principally omentum, and in persons who have only to live a life of ease and quietude. But if intestinal, and in labouring persons, who must again be exposed to exertions such as have originally caused the rupture, it seems to me little likely to be of permanent benefit, as the mouth of the sac will not contract so as to prevent the escape of the bowels, and, by time and laborious exertion, it will probably again resume its former size.

General Observations on Strangulated Ruptures.

A strangulated rupture differs from an irreducible or a reducible rupture in not being returnable like the latter; and although unreturnable, like the former, yet differing from it as it interferes with and suspends the functions of the bowels, and presents a train of symptoms which especially distinguish its condition.

Symptoms.—The symptoms of a strangulated rupture are a hard unyielding swelling on the belly or its immediate neighbourhood, and more or less inelastic, according to its actual distension, whether the swelling be small or large. It is usually accompanied with costiveness and vomiting; sometimes both equally severe, at other times one more violent and obstinate than the other. The costiveness depends on the intestinal passage being obstructed, so that the contents of the bowels, having reached the strangulated part, can pass no farther. But if the intestine below the strangulation be loaded with fæces previously to the occurrence of strangulation, it may and frequently is capable of emptying itself, and therefore not unfrequently, for a time, motions are passed, although the communication between the lower and upper part of the alimentary canal be entirely cut off. The vomiting depends on two circumstances. The less important one, though it may be exceedingly distressing, is when a portion of omentum has passed into the rupture-sac, and its return being either partially or completely prevented, it is stretched like a cord between the rupture-sac and the stomach, which cord being swayed about by the movement of the intestines, is continually pulling upon and irritating the stomach, so as to excite it to reject its contents. That such is one of the causes of vomiting, is proved by the case related by Pott, in which, in a person who laboured under omental rupture, and found it difficult to keep it up with the best truss he could have, it occasionally slipped down behind, and "when this happened, it gave him such immediate and acute pain at his stomach, and made him so intolerably sick, that he was obliged immediately to throw himself on his back, and procure the return of the piece of omentum." So well marked a case as this does not, it is true, very often occur, but it nevertheless clearly shows that the pulling of the stomach by the omentum in the sac is one of the causes of vomiting in strangulation. This state of things may exist without any obstruction of the intestinal canal, although, however, it may happen that omentum which has passed into a rupture-sac, may so confine an intestine even within the cavity of the belly, as entirely to cut off the lower from the upper part of the alimentary tube. The more common cause of vomiting under strangulation is the actual closing of the intestinal passage by the mouth of the sac, into which the rupture has been thrust, or by some band in the interior of the sac passing across it, or by entanglement in omentum, which has also found its way into the sac. In either of these cases the result is the same, as if a cord were tied tightly around the intestine so as to close its tube. The contents of the stomach and upper part of the alimentary canal are for a time carried along by the peristaltic movement, till they reach the seat of obstruction, but being unable to proceed further, the peristaltic action is reversed, and the intestinal contents are carried back and poured into the stomach. It would seem that this inverted action is speedily propagated from the strangulated part to the stomach; for first there is simple vomiting of the contents of the stomach, afterwards bile is thrown up, and this is followed by ejectment of what is called feculent matter, though that it is really such I much doubt, as in by far the greater number of cases, the small and not the large intestines are those which are strangulated, and fæces are not formed till the contents of the alimentary canal have reached the latter, and received the secretion of the so-called appendix cæci. The simply offensive smell, and the yellowish or greenish, more commonly the latter, coloured matter which is thrown up, is not necessarily, nor is it usually fæces, but merely chyme, with the addition of the biliary secretion and the emptying of the gall bladder, which is specially excited to pour out its contents, as it were, to induce more active efforts in the intestine to perform its ordinary function, which, it being unable to do in consequence of the strangulation, the additional quantity of bile only still further promotes by its irritating properties the disturbance already set up.

In proportion as the stomach is irritated by the vomiting, its functions are also disordered, and hence flatulence is produced, and the patient belches up almost continually large quantities of air. To the distension of the stomach with air, may probably be attributed the sensation of tightness at the midriff, often, though not always, present during strangulation, and which is not unfrequently felt in vomiting under ordinary circumstances. The dragging generally felt at the pit of the stomach during strangulation may either depend directly on the pulling of the omentum, which is one of the causes, as I have mentioned, of vomiting, or upon the pulling of the mesentery when the intestine is strangulated.

The continuance of the vomiting, frequently increased by the patient taking fluid to quench his thirst, or by the too frequent practice of giving purgative medicine to excite the intestines to a duty which they are mechanically incapable of performing, soon breaks down the strength and spirits; the countenance becomes distressed and haggard, and the pulse quick, small, and feeble — all which symptoms are to be attributed to the state of depression from the sickness, either squeamishness or actual vomiting, rather than to any other cause. As the case proceeds there is soreness of the belly, at first probably arising from the violent and repeated action of the muscles in vomiting; but subsequently this is converted into tenderness on pressure, and even pain more or less severe and constant, without pressure, but increased by it; the belly also becomes tense and not unfrequently tympanitic, and the pulse hard and thready, like a wire beneath the finger—symptoms indicating the

presence of inflammation of the peritoneum, which, originating at the seat of strangulation, spreads more or less quickly over the whole cavity of the belly and its contents. Hiccough is not unfrequently present; this has been often mentioned as a symptom of mortification of the rupture; but I have so frequently seen it come on very early after strangulation, and without any mortification, that I think it can scarcely be so considered with justice. After a period of less or greater duration, according to the severity of the strangulation, the patient becomes easy, and the vomiting sometimes, but not always, ceases, and it might incautiously be presumed that this is a favourable change, but it is the very contrary, and affords strong presumption that mortification has ensued, and the case is fast hastening to a close.

The patient's condition is still more alarming if the countenance be sunken and pallid, the face and limbs bedewed with clammy sweat, and the pulse become feeble, smaller, and slowly imperceptible; and if, in addition to this, the swelling, previously hard and unyielding, become soft, doughy, and crackling, and sometimes even subsides, then there is little doubt that the protruded bowel has mortified, and that it has even given way, and emptied its contents into the sac, and perhaps into the belly also. Death soon follows.

GREAT MEETING
OF THE
NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS
IN
MEDICINE, SURGERY, AND MIDWIFERY
AT THE
HANOVER SQUARE ROOMS, HANOVER SQUARE, APRIL 17, 1846.

An exceedingly large and influential meeting of the members of this Association was held on Friday evening last at the Hanover Square Rooms, in pursuance to advertisement, to receive a Report from the Committee, and to consider the propriety of forming a National Institute of Medicine, Surgery and Midwifery. The meeting was very numerously attended, there being at one time about 700 gentlemen present. Among these were Messrs. Pennington, Squibb, Fuller, Bowling, Bonney, Streeter, Bedingfield, Sparkes, Randall, Wooldridge (Southampton), Webster, Baker, Lavies, Merriman, Davis (Hampstead), Hardwick, Craddock, Eyles, Tegart, Bird, Dodd, Vickers, Ancell, Clifton, Stocker, Dale, Hammerton, Headland, Maclure, Martin (Reigate), Semple, Smith, Webster, Wheeler, Cooke, Daniell (Newport-Pagnell), and Miles Beale.

It was moved, seconded, and carried unanimously, that R. R. Pennington, Esq., take the chair.

The chair having been taken, it was announced by the secretary that a very large number of letters had been received from various parts of the country, expressive of the confidence of the members in the proceedings of the committee, and that the following provincial members of the committee, honorary secretaries, and members of the Association, in some instances representing large sections of the Association, had signified their intention of being present at the meeting:—Thomas Haffenden, Hanwell; — Tyson, Newmarket; R. J. Peck, Newmarket, honorary secretary; J. C. Hall, East Retford; Richard Caton, Bradford, Yorkshire; J. H. Norton, Shirley, near Southampton; J. B. Easton, Stebbing, Essex; William Hore, Shore- [illegible] ford; James Cr[illegible]me, Homerton; D. Hock, Mill-Hill, Hendon; R. G. Broxholm, Sunbury; W. Richardson, Highgate; H. Dixon, Cricklade; E. George, Sandgate; J. R. Monday, Ulverston; T. Tomkin, Witham; W. F. Haines, Pinner, near Watford; E. S. Shearman, Rotherham; W. Chaldecott, Dorking; J. Howell, Wandsworth; D. Morris, Colchester; Henry Storer, Bath; H. Wooldridge, Southampton (representing the Southampton branch); G. Rogerson, Liverpool (representing one hundred members of the Association in Liverpool); J. C. Burrows, Brighton; C. Shillito, Brighton.

The President then read the following address:—

Gentlemen,—In again occupying this chair, which I do with heartfelt satisfaction, I feel called on to make a few remarks as to the past and present state of the profession.

Since 1815, now more than thirty years ago, I have continually felt the most lively interest in the welfare of the general practitioners; that interest still continues, and the strongest proof I can give you of the strength of this feeling is that, at this advanced period of my life, I come forward to assist their cause.*

At the time of passing the Apothecaries Act, I hailed it with pleasure as being the first step to enable the general practitioners to assume a decided station of respectability; this has been still unattended with that progressive advancement which so important and useful a body of men deserved.

It is only within the last year that a prospect appeared to open of placing them still higher in the scale of rank their increased attainments, the improved curriculum of education adopted so successfully by the Apothecaries' Society, worthily entitled them to. I allude to the hopes held out by the Secretary of State for the Home Department for granting a charter of incorporation; with the failure of the negociations for that desirable end I conclude you are all familiar.

The able report which you will hear read this evening will inform you of the probable cause of the failure of those negociations, and you will also hear in detail a proposal for the adoption of a line of active conduct which in my judgment cannot fail of being attended with the most marked success in obtaining for the general practitioner that satisfaction which hitherto he has never approached; to that report I call your undivided and earnest attention, fully assured that the lucid explanation contained therein will clear the mist from the minds of all who entertain doubts as to the ultimate success of our great undertaking. (Applause.)

I feel I should be wanting in justice to the Association did I fail to express my sentiments of high appreciation of the conduct of the committee, sub-committee, and honorary secretaries (applause); the unvarying unanimity which has prevailed throughout the entire discussion of so large a body of members, speaks in the highest manner of the character of the gentlemen composing these bodies, and augurs favourably of the intelligence of our class of the profession, and of the result, if, as I confidently anticipate, we shall have the management of our own body. I think it will not admit of contradiction that in no society of men where the interests have been so important had ever more decided feelings of unanimity been shown, more gentlemanly forbearance against unjust aspersions (hear, hear), or more unvarying and steady perseverance in the onward and fruitful path which, up to this time, they have trodden.

After paying my tribute to your committee and sub-committee, I cannot fail to offer the same to your honorary secretaries, Messrs. Bird and Ancell. (Great applause.) I should be wanting in every principle of justice, did I not, in the most unqualified manner, express my feeling of grateful admiration for their untiring and incessant attention to the interests of your Association (applause); the part these gentlemen have taken in the deputation with Sir James Graham merits your highest consideration, and no eulogium of mine can be sufficient to convey the opinion I entertain of these disinterested and valuable services. (Great cheering.)

The undeviating steadiness which all concerned in conducting the affairs of this Association have displayed, is deserving of the highest praise.

In conclusion, I feel proud to affirm my conviction that the same amount of integrity and uprightness which has, up to this time, kept the Association together will continue, and ultimately obtain for its members that honourable distinction to which they are so justly entitled. (Applause). Every influence I, as your president, can exert, shall be employed for the furtherance of the great object; all that is in my power shall be done to assist in carrying out your views; my greatest pleasure will arrive when I am enabled to congratulate this Association on the complete fruition of its hopes. (Great applause, continued for several minutes.)

The Report of the Committee was then read by Messrs. Bird and Ancell, the honorary secretaries.

REPORT.

The committee of the National Association have called the members together, in the first place, for the purpose of making a report of their proceedings; secondly, to direct the attention of the members to some of the more important considerations connected with the present state of the medical question; and, thirdly, to bring under the consideration of the meeting the result of their experience and deliberations as to the future course which the general practitioners of this country are called upon to pursue.

The proceedings of the committee up to the 4th day of March have been printed in the "Transactions" of the Association, and it will be unnecessary to occupy the valuable time of the meeting to any great extent with a recapitulation of their contents. It has at all times been a source of gratification to the committee that the "Transactions" have been generally approved of by the members of the Association, and that they have always appeared to fulfil the special purposes for which from time to time they have been issued, and it gives the committee the greatest pleasure to state that, so far as they can judge from their correspondence and communications with their professional brethren, the last number, which records the more recent proceedings of the committee in their negociations with the government, and expresses unequivocally the sentiments of the committee upon the result of those negociations, has been received by the members at large with equal, if not greater, satisfaction than any previous number.

At the last special meeting of the Association, held on the 6th of May, 1845, the committee reported that they had succeeded in convincing the government of this country that the late attempt at legislation to which the Right Honourable the Secretary of State for the Home Department had become a party, was inimical to the interests of the general practitioners. A principal feature of the contemplated legislation was to create, under the title of "Licentiates in Medicine and Surgery," a distinct and inferior grade of practitioners, whose education was to be placed under the control of the Colleges of Physicians and Surgeons, and who were to be deprived of all hope of, or pretension to, any corporate privileges whatever; with which inferior grade of practitioners the great body of the existing class of general practitioners was to be identified. Subsequently to the representations now referred to by the committee, of which a full report has been furnished to the Association, Sir James Graham admitted the importance of the general practitioners as a class, and the necessity on public grounds of sustaining their character and qualifications; he accordingly called for parties possessed of full power to treat with him on their part, with the view of repairing the error at first fallen into, of promoting the respectability by upholding the qualifications of the great body of the profession, and for the purpose of arranging the necessary preliminaries for the grant of a charter to incorporate the general practitioners in a new institution of a collegiate character, and thereby to provide for this large proportion of the whole profession the rights and privileges which they so justly claim.

The individuals appointed to treat with the Right Honourable Baronet were, R. R. Pennington, Esq., James Bird, Esq., and Henry Ancell,

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* In proof of his readiness and anxious desire to support and further the cause of the Association, not only by his attendance at the meetings, and his personal service, Mr. Pennington has recently presented a second donation of *one hundred pounds* to its funds.

Esq., on the part of the National Association; and John Bacot, Esq., and John Ridout, Esq., on the part of the Society of Apothecaries; these gentlemen were invested as a joint deputation, with full authority on behalf of the National Association of General Practitioners, to accept or reject such a charter of incorporation as the Crown might be advised to grant, and on behalf of the Society of Apothecaries to relinquish their present privileges as soon as the terms of the proposed charter should be adjusted to the satisfaction of the deputation. Sir James Graham was fully satisfied as to the plenary powers vested in this joint deputation, and treated with it accordingly; the deputation have furnished the Association with three reports on the subject of the negociations subsequently entered into; and these reports have been printed in the "Transactions" of the Association, bearing date May the 17th, 1845, August the 14th, 1845, and March the 4th, 1846; the committee accordingly presume that the members of the Association are fully acquainted with the character, progress, and termination of the negociations with the government. The powers vested by the National Association in the gentlemen who represented it in that deputation are now resigned, and the committee publicly reiterate their entire satisfaction at the manner in which the deputation has sustained the interests and honour of the general practitioners of this country, and their cordial thanks for the exertions they have made to carry out the objects of the Association. (Great applause.)

The members are aware that in these negociations the educational question constituted the real difficulty. Before closing their labours, the joint deputation published the three reports above referred to, in a separate pamphlet, with a preface on that part of the subject, and the committee most cordially concur in the sentiments there set forth, and feel thoroughly convinced that they will meet with the approbation of this meeting, and that they are calculated to impress all parties with the magnitude and importance of the question at issue.

The deputation state:—"The Minister has satisfied himself that it is of the highest moment that the medical attendant of at least nine-tenths of the population should be so educated as to render him competent to the discharge of the duties which the public require at his hands; and that the public have a deep interest in upholding the professional and social status, and elevating the moral and intellectual qualifications of men who are entrusted with the health and lives of thousands of their fellow creatures.

"The deputation have endeavoured to convince the Secretary of State, that it would be unsafe to entrust the education of this body of men either to those who deny, or to to those who tardily and unwillingly admit, that the general practitioner should be educated for all the emergencies of his profession. (Hear, hear, and applause.) It has been asserted that a great mistake was made by the legislature in 1815, in confiding the medical education of the general practitioner to examiners of his own grade; that the education of the class which it was the object of the statute to regulate, has been unduly elevated; and that a wider range of practice has been assumed by that class than the legislature had contemplated, or would have been prepared to sanction. It has been the duty of the deputation to satisfy the minister, that if an error *was* committed by the legislature in 1815, it was an error which it is too late to repair now; that if the effect of that error has been to educate the class more highly than is thought expedient by those who were originally invited to take upon *themselves* the duty of superintending its education, but declined to do so, it is too late for the legislature to retrace its steps; that one of the first effects of improved education on an individual is a desire to see that education extended to others (hear, hear); and that experience has shown that, in the case of the general practitioner, what is true as applied to an individual is no less true as applied to a class; that under such circumstances the only course open to the legislature is the onward course, and that to abandon the exclusive control of the education of the great majority of the medical practitioners of this country to those who, if not actually opponents of the principle of an improved and improving standard of qualification for the general practitioner, have been slow and unwilling converts to it, would be to check the extension of medical science, and to inflict a most serious injury on the great mass of the people." (Great applause.)

"The deputation have taken their stand upon these principles, and they remind the general practitioners that the proposal to entrust them with the education of their own class is an unwelcome proposal in more influential quarters than one. The claim, however, of the general practitioners to a real influence and control over the education and examination of the future members of their own class, when dispassionately considered, tends so obviously to the public good, and the grounds upon which that claim rests are so incontrovertible, that whenever the opportunity arrives (as arrive it must) for a full and fair discussion of the subject by the legislature, there need be little apprehension for the result."

The objects of the National Association have manifestly been twofold, to prevent bad legislation, and to assist in obtaining such legislative changes as are calculated to advance the interests of the public, by promoting those of the large class of medical and surgical practitioners of which the Association is composed. In so far as the Medical Bill first introduced into the House of Commons by the Secretary of State, at the instigation and with the advice and consent of certain colleges is concerned, which Bill, the committee repeat, they sincerely believe was most inimical to the interests of medical science and of the medical profession (hear, hear) in this country, the Association has been completely successful in preventing a defective legislative measure. As respects the second part of their duties, that of obtaining such a settlement of the medical question as would prove satisfactory to the general practitioners, the committee regret that up to the present time their exertions have not been attended with success.

Without entering into details, it will thus be obvious to the members of the National Association, that the profession is in the same position as it was previous to the government undertaking to legislate for it; with, however, one most important exception. By the new charter granted to the College of Surgeons in the year 1843, a deep and immeasurable injustice has been inflicted upon a vast majority of the members of that college (immense applause); the members of the College of Surgeons constituting the largest and most respectable portion of the general practitioners of this country, and of the National Association.

With respect to this new charter and the College of Surgeons, the committee entreat most earnestly that the members will bear in mind how the matter stands. This charter was obtained by the College of Surgeons for the purpose of conforming to the Bill for regulating the Practice of Medicine and Surgery, subsequently introduced into the House of Commons by the Secretary of State for the Home Department; which Bill, as before stated, was effectually opposed by the general practitioners, because with other objectionable matter, and coupled with the charter, it contemplated the institution of an inferior grade of medical practitioners, under the title of "Licentiates in Medicine and Surgery." It has been made plain enough that these practitioners were to be educated for the ordinary exigencies of medical and surgical ministrations, but for these only (hisses, and cries of "Shame, shame"); and, moreover, that the existing class of general practitioners was to be brought down in the eyes of the profession and of the public to the level of these licentiates. Here was a deliberate scheme to lower the standard of education and qualification, and to diminish the respectability of the great body of the profession in this country; and, as respects the practice of surgery in particular, the council of the College have gone so far as to state, not only that they were a party to the intended scheme of licensing persons to practise surgery who would not in fact be fully *competent* as surgeons, but that thousands of the individuals certified by them of late years, as being competent to practise surgery, are fit only to fulfil the ordinary exigencies of surgical art. (Hisses.)

The policy of the council of the College of Surgeons, in the contemplated legislative changes, was also manifestly to monopolise not only hospital, but also other surgical appointments, for the small proportion of their members to whom they grant the fellowship. To effect this, the fellows of the college were to be highly educated, and their qualifications to practise surgery to be fully and completely tested, whilst the great mass of practitioners were to be educated upon a lower standard, and their qualifications were to be tested for an inferior degree of surgical attainment. Looking at this policy in the most favourable point of view, its object was to create a few great surgeons—the community, not within reach of these great surgeons, being left dependent for surgical assistance upon a class comparatively incompetent. How, the committee beg to inquire, would such a principle of legislation as this affect the limbs and lives of the people of this kingdom? (Hear, hear.)

The medical practitioners of our towns and villages, our collieries, manufactories, and shipping, are not likely to be fellows of the College of Surgeons, so that on the wide ocean and in the recesses of a mine, where the most serious accidents occur, our fellow creatures would be subjected to the practice of those who, although authorised by law to practise as surgeons, are educated to that degree of knowledge only which would qualify them for the treatment of the simplest cases. (Hear, hear, and applause).

Of the premeditated character of these proceedings of the College of Surgeons we have ample proof in the evidence given before Mr. Warburton's committee, and a most forcible illustration in the following fact: Before obtaining the new charter, the standard of qualification by age was reduced from twenty-two to twenty-one years. For many years no individual could present himself at the college for examination until he had attained the full age of twenty-two years; but in the year 1839, when the number of surgical practitioners met all the wants of the community, and was still increasing, then, without any reason, without even a plausible pretext, the council made a bye-law enabling candidates to obtain their diploma at twenty-one years of age. Every one will admit that this curtailment of the period of study by the last and most valuable year, in such a science as that of surgery, was calculated most seriously to damage the respectability of the great body of surgeons, and the council cannot plead ignorance of the tendency of this curtailment, inasmuch as they have made a lengthened period of study an essential requisite for the fellowship. (Hear, hear.) At the period to which the committee now refer, the council also depressed the standard of education and qualification for the membership of the college, by diminishing the period of study from five to four years; and the point which the committee most strenuously insist upon, is this,—that when, subsequently, the council was engaged in the business of medical legislation, for the ostensible purpose of improving the medical profession, they adhered to these pernicious changes—the apparent object of this body being, first, to make the distinction between the general practitioner and the fellow as wide as possible, and then to impose upon the public a numerous body of imperfectly educated licentiates, who were to be legally entitled to practise upon the mass of the population; providing for the wealthier classes and others who could fortunately obtain their assistance the class of fellows possessing a higher degree of professional skill and competency.

It behoves the medical profession to examine the grounds upon which the council of the College of Surgeons have founded this policy. They have attempted to justify it on the broad principle that the general practitioners are both incompetent and unworthy. In particular, they have made, or rather have attempted to make, the dispensing of medicine by the medical and surgical practitioner a badge of degradation. The council have not only made the dispensing of medicine a reason for exclusion from a seat at their board, but

the original intention, as the committee are well advised, was to refuse even the fellowship to every individual who dispensed his own medicines. The committee are well aware that the council, knowing the untenable ground which they occupied, gave up that point to a limited extent in reference to provincial practitioners; and that they also, for the purpose, as it would seem, of making an exception to prove a rule, gave the fellowship to two or three metropolitan practitioners; but the council of the College of Surgeons must give the general practitioners of this country credit for very little discernment, if they believe that the latter can be blind to the real operation of the charter thus carried out; the object is plainly to prevent the general practitioners, particularly those who dispense their own medicines, having any influence in the council; and it has been sagaciously calculated that the franchise may be safely given to a limited number of provincial members of the college, who necessarily dispense their medicines, since of a limited country constituency who must personally attend in London to record their votes, a few individuals at most would do so on any one occasion, and thus, by shutting out the metropolitan general practitioners, the council feel secure that the government of the college will be perpetuated in the persons of the pure surgeons of the London hospitals. (Hear, hear.)

The committee have considered it a duty to inquire most critically how far the conduct of the council, in their attempt to degrade the general practitioners of this country, in consequence of their dispensing their own medicines, is founded in justice and propriety. In the first place, the committee allow that in times past, and to some extent at the present time, certain abuses may have been connected with the practice of the professional man dispensing his own medicines; in the next place they admit that it conduces to the dignity of the profession, and to the welfare of the public, to elevate the character of the profession as far as possible above that of a trading community; that for this purpose, to the utmost that the public will sanction, the general practitioners should cease to be remunerated in proportion to the medicines supplied to their patients; and that they ought in no instance to be allowed to trade in drugs (great applause); and it is further admitted that the profession will be placed altogether on a more honourable footing when that standard of remuneration for medical and surgical services is entirely abolished. On this point the committee affirm, on the part of the general practitioners that in their practice among the more intelligent classes of the community, these evils are being progressively, and they may say of late years rapidly, corrected, and that their correction proceeds *pari passu* with the increased scientific qualifications of the general practitioner and the increased intelligence of the community. (Applause.) But after saying thus much, the committee further affirm, that the mass of the population of this country, from long custom, habit, and, in many respects, from the necessities of the case, as, for instance, throughout the country, in the army and navy, in collieries and mines, and on board ship, must and will continue to employ, as their ordinary medical and surgical attendants, the individuals who dispense their own medicines; accordingly, although many exceptions occur, where, from various circumstances, the general practitioner prescribes, and does not dispense his medicine, the great mass of the profession must continue to dispense. If the general practitioners as a body were to cease to do so, a large proportion of the practice of physic and surgery would go out of the hands of the regular profession, and must necessarily be taken up by the chemists and druggists and other unqualified persons (hear, hear, and applause); and it is most important here to remark, that the principle advocated from the first by Sir James Graham, of throwing open the practice of physic and surgery to any one who might think proper to undertake it, provided only that he does not assume certain specified titles, gave immediate facilities for this change.

Thus, under the title of dispensing chemists, pharmaceutical chemists, or any other title in present usage or newly coined, and not actually prohibited by the Act of Parliament, any individual carrying on the business of a chemist and druggist would have had a legal right to fulfil all the "ordinary exigencies" of the profession, to attend, at the bedside of the patient, either with, or for, the consulting practitioner, and to visit or to prescribe for, and to perform surgical operations upon, the sick at their own homes, without any medical or surgical education whatever, or with such an education, for instance, as under an Act of Parliament for regulating the business of the chemist and druggist, the Pharmaceutical Society might prescribe.

Seeing that the great body of the profession must dispense their own medicines, the question arises whether it is for the advantage of the profession, for the advancement of science, and for the good of the community, that the individuals who do so should collectively constitute a degraded class; whether, in fact, the act of dispensing his own medicine should be a badge of disgrace to the professional man. Surgeons who are members of the council of the college carry their own surgical appliances in their carriages—why should this be considered less degrading to the pure surgeon than the preparation of medicines under his own eye by the surgeon in general practice. As medical science advances, the physical sciences become daily more applicable, and the habit of manipulation becomes more essential. There is nothing, in truth, more degrading in the practice of the various branches of pharmacy by the general practitioners than in many of the ordinary proceedings of consulting practitioners. The whole depends upon conventional usage. The custom of dispensing has been followed from time immemorial by the highest grade of medical men in Scotland, and by more than nine-tenths of the practitioners, metropolitan and provincial, throughout this kingdom, and it is attended with many advantages—the practitioner, for instance, who has to depend in dangerous diseases upon the action on the system of powerful remedies—as mercury, antimony, opium, elaterium, or hydrocyanic acid—will always prescribe with greater confidence when he can secure by his own superintendence the purity of his medicines, and accuracy in compounding them. Moreover, in rural districts, there are no chemists and druggists. The committee feel themselves called upon to ask what is likely to be the immediate effect and the ultimate result of so far degrading the class of medical and surgical practitioners, who must necessarily make manipulation a part and parcel of their education and practice, as not only to depress their standard of qualification, but to deny them a social status, all corporate privileges, and almost every motive of honourable ambition. They believe that legislation in this direction is calculated to inflict a most serious injury upon the profession as a whole, and whilst they admit the existence of certain evils connected with the present system as to dispensing, and whilst they have been striving, and are prepared to continue their efforts, to obtain such an institution as would lead certainly and quickly to the correction of those evils, their most strenuous advice to the general practitioners of this kingdom, in the present state of the law which regulates medical practice is, both on public and professional grounds, neither to allow themselves to be induced to relinquish the dispensing of their own medicines, nor to suffer themselves to be degraded as a class, because they perform that part of the functions appertaining to the practice of medicine and surgery. (Great applause.)

The council of the College of Surgeons have publicly taunted the general practitioners with including among their numbers the puffers and venders of nostrums and secret remedies, individuals who have connected themselves in business with chemists and druggists, retail shopkeepers who expose for sale cattle drugs and perfumery, and persons of notoriously bad character. (Great laughter). The committee of the National Association repel this taunt as manifestly unjust. It is especially the council of the College of Surgeons who have not only tolerated, but, by the laxity of their administration, and in violation of their pledged duty to the public and their own respectable members, have indirectly encouraged those disgraceful abuses. (Hear, hear, and applause.) The council are known to boast of their influence with the government and the legislature; it surely rested with them to obtain powers, if they did not already possess such, to correct these abuses. But the council, in fact, have all along been possessed of sufficient power, and there are strong grounds for the belief that they have intentionally evaded the exercise of it, and have winked at the abuses with which they charge the members of the College (hear, hear), for no other purpose than to associate those abuses with the act of dispensing, and, by imputing them to the whole class, have thereby furnished for themselves an additional excuse for limiting the franchise. (Hear, hear.) The National Association has sought for a representative institution, because with Englishmen representation is regarded as the legitimate source of power, and because, with other objects, they want an institution invested with such powers that the general practitioners may themselves correct the discreditable practices in a liberal profession which have been so long tolerated by the council of the College of Surgeons.

If the council had no other motives than these for restricting the franchise among the general practitioners, the committee deny that there is the slightest rational ground for the limitations they have adopted; but the committee believe that there are other and more weighty reasons—reasons which operate with the government, the legislature, and the College of Physicians, but which the council have thought it expedient to keep back. The original charter of the college constituted it a college of pure surgeons—as the council themselves express it, "for the special cultivation of surgery"—and the council are bound by an oath to maintain it as such. So long as the profession rests satisfied without a representative government, and accordingly without any interference with the internal arrangements of the college, the council assume that they can, consistently with their oath, take cognizance of the general practitioners so far as surgery is concerned; but it is deemed not to be consistent with the constitution of the college to allow those who are more medical than surgical practitioners to interfere with its internal government and arrangements. What the council, in fact, desire is this, not only to prevent the general practitioners having any power or control in the college which they consider they are bound by the constitution of the college to do, but they desire at the same time, in perpetuity, to continue to receive the examination fees of the general practitioner. With these views, their policy has for many years had a uniform tendency to impede the progress of professional improvement in the masses, and to weaken or vitiate their claim to consideration in a legislative point of view.

The committee of the National Association assert that, in common justice and humanity, this policy ought to be put an end to. If, as the committee believe, the College of Surgeons cannot be made the home for general practitioners, and the connexions between the college and the general practitioners can only be sustained by lowering the surgical status and efficiency of nine-tenths of the surgical practitioners in this country, the College of Surgeons ought to relinquish all control over the education and qualifications of the general practitioners; and the committee firmly believe that the college might do this with advantage to its character, as a body devoted to the cultivation of pure surgery, and with immense advantage to the great cause of medical and surgical science.

The College of Surgeons constituted the obstacle to the Apothecaries' Society exercising the power of testing the surgical qualifications of their members, and rendering their curriculum of education and their examinations of the general practitioner complete. The assertion that the general practitioners voluntarily seek the membership of the college is not strictly correct. The truth is that, although the license to practise held by the gener[al] practitioner enables him without illegality [to] practise every branch of the profession of me[di]cine, and indeed is the only compulsory legal [title] to practise, no general practitioner can fill [the] office of surgeon in a public institution wi[thout]

some specific testimonial of his qualifications to practise surgery, and his legal certificate of qualification from the Society of Apothecaries not specifying surgery is in this respect incomplete. Accordingly, in the absence of a complete curriculum of education, upon the broad principle that medicine and surgery are one science, with a comprehensive and satisfactory test of competency by examinations on the same principle, every young man who has his way to make in the world, and is not willing to undertake the duties of general practice at a great disadvantage, is *compelled* to seek the certificate of the College of Surgeons, howeveer imperfect the curriculum of educaton may be, and however inadequate the test of qualification, since the College of Surgeons is the only source from which a certificate in surgery can at present be obtained. (Great applause.)

The committee have entered into these details at the risk of proving tedious, because they considered it necessary, in order to obtain a thorough understanding of the question which has arisen, whether it is practicable or feasible in any wise to alter the College of Surgeons so as to convert it into the institution which is required as an alma mater for the general practitioners in medicine, surgery, and midwifery, of this country; and they now proceed to re-state what, after all their discussions, deliberations, and negociations, they still believe to be the legitimate objects sought for by the general practitioners.

In the first place, the general practitioners claim a representative institution with an elective council, possessed of authority to frame bye-laws, whereby they would be enabled to check all improper practices of their members—whereby they might give a proper direction to the principles upon which professional practice ought to be conducted—whereby they might settle, as the committee believe, most amicably, the disputed questions between the qualified practitioner and the chemist and druggist—and whereby they would effect numerous ameliorations and improvements in the medical profession, so as to establish it on the basis of true respectability in the eyes of the public and of the whole world. (Great applause.)

Secondly,—They claim the unfettered power of determining a curriculum of education, including all that is requisite both in a general and scientific point of view, to secure a sufficient guarrantee of competency in every individual who is to enter into general practice, and the unfettered power of selecting a Court of Examiners and of instituting such examinations as will prove a satisfactory test of such competency. These objects are only to be effected by a charter of incorporation and an Act of Parliament to support that charter; and would be obtained by the concurrence and co-operation of the Society of Apothecaries with the general practitioners, in conformity with the liberal policy of that society in disclaiming any corporate or particular interest while advocating the claims of the general practitioners to a separate and independent incorporation (Applause). The expression by the Society of Apothecaries of "their readiness and willingness, irrespectively of personal and corporate considerations, to resign all further interference with the education or control over the affairs of the general practitioners, and to assist in obtaining the grant of such independent charter of incorporation as would secure to the general practitioners an efficient control over the education and examination of their own class through the machinery of the organisation of the members of that class," indicates the liberal views entertained by the society.

Thirdly,—Although, in the course of the recent negotiations, the committee waived the point of a summary penal enactment, the Right Hon. Sir James Graham having stated his determination not to make restriction on the practise of physic and surgery by unqualified persons a part of his measure, and a majority of the committee's constituents having expressed their desire to accept with gratitude the proposed legislation of the Right Honourable Baronet—and although in the bills introduced into Parliament the indirect checks were of considerable importance, and in the two atter of these bills the joint deputation succeeded in inducing the Government to preserve the existing penal clause, yet the committee are perfectly convinced that these intended safeguards to the public were incomplete and insufficient, and that the claim by the medical profession on public grounds for a summary penal clause has a foundation in justice and sound policy; and they consider that all classes of practitioners ought to fall back upon this claim as one of the essential elements of medical reform with a view to any future legislation. (Great applause.)

The government having abandoned medical legislation, at least for the present, the field is, of course, open; and it becomes a serious question what steps the general practitioners ought, at the present moment, to take. The committee are of opinion with the joint deputation, as expressed in the preface to their published reports, that matters should not and cannot be allowed to remain stationary. They consider that the general practitioners ought to maintain their organisation, with an authoritative council at all times prepared to act for them, should any future attempts be made by other parties in the matter of legislation; and invested with power, also, on the part of the general practitioners, to take, without a moment's delay, such active measures in furtherance of their objects as in their judgment may be calculated sooner or later to bring the long-continued exertions of the medical profession to a successful issue. (Applause.)

But the committee regret to say that they do not at present see a prospect before them of this question being speedily brought to an issue, so as to justify them in recommending the National Association to continue its present ephemeral mode of existence. The Association has now a committee consisting of one hundred individuals, who have acted in the immediate vicinity of the seat of government as a kind of convention; they were appointed for the purpose of coping with the emergency created by an immediately impending legislative aggression, and the footing upon which they were placed, was the most judicious possible for this particular purpose. But the committee feel bound to state their conviction that if the general practitioners are to continue their organisation with any chance of permanency for the purpose of protecting their own and the public interests, and of ultimately obtaining their legitimate objects, they must place the Association upon a broader and a more substantial basis (great applause); and with this view the committee recommend to the meeting the establishment by the National Association, originally formed for the attainment of certain specific objects, of a NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY (protracted applause), for the purpose of comprehending a much wider range of social and professional advantages.

The meeting will naturally desire to be made acquainted with the immediate advantages which would accrue to the general practitioner as well as the more remote objects which would be aimed at by the establishment of a National Institute of Medicine, Surgery, and Midwifery, on such a basis, and the committee will endeavour on these points to explain their views as concisely as possible.

In the first place, they contemplate that the NATIONAL INSTITUTE should be governed by a representative council composed both of provincial and metropolitan members, and should be organised with local secretaries and branch associations in every Parliamentary district in the kingdom, after the plan of the National Association. The first duty of this representative council would be vigilantly to watch the course of affairs, so that in the event of any new attempt at legislation they would be prepared at once to advise the profession of its bearings, and to take such steps as the interests of the body they represent or the public interests might require. The committee will illustrate the importance of such a representative council to the general practitioners of this country, by reference not only to the recent attempt at direct legislation, but also by referring to several other measures affecting the medical profession, which have been, or are likely to be, brought before Parliament. There is at present before the legislature, besides the Poor-law Amendment Bill, which contains clauses of it is intended to appoint commissioners who are to take upon themselves the direction and control of charity affairs. During the last session a bill was prepared and brought into the House of Commons by the Earl of Lincoln and Sir James Graham, intituled the *Sewerage and Drainage, &c., of Town's Bill*, in which Bill the appointment by commissioners, under the approval of the Secretary of State, of a class of functionaries hitherto unknown in this country, with the title of "Medical Officers of Health," was contemplated for every town and district throughout the provinces, and there can be no doubt that an Act of Parliament of this nature must be sooner or later passed. It would become the duty of a representative council to look well to the provisions of such Bills as these, and to see that the appointments are not made subservient to class interests, or a monopoly for the junior fellows of any particular college. (Hear, hear, and great applause.)

No person can be blind to the fact that social changes are now in progress which must most materially affect the medical profession, and in particular the general practitioners; and the committee seriously inquire whether the interests of the general practitioners are any longer safe in the present state of things. The College of Physicians will take care of the interests of their own members; the council of the College of Surgeons will doubtless take care of the interests of the fellows; as to their members, it is now written in the pages of the history of the college, that except so far as the examination fees tend to the support of the college, it is comparatively indifferent to their interests. (Protracted applause.) Where then is the conservative power of the general practitioners' interests? Of the interests of nine-tenths of the medical practitioners of this country, who have no corporate provision—no representation—no home of their own. Or, to put the question in a broader light, where is there a power reposed to protect the public interests — the interests of every individual in this community, from the Queen to the humblest of her subjects, who, is liable to be thrown upon the judgment and skill of the general practitioners in medicine, surgery, and midwifery? The Apothecaries' Society has done, and will continue to do, its best; but the limitation of its powers is an effectual barrier to its efficiency; the great body of the profession has no authoritative head to depend upon, and the committee hold that it is imperatively called upon, both on public and professional grounds, to place on a permanent basis a collective organisation, with as much power and authority to perform the various functions required, as the profession by numbers, respectability, talent, and adequate funds can give. The committee of the National Association has acted to the best of its ability throughout the trying circumstances of the last eighteen months—it remains for the profession to judge with what advantage—but the profession undoubtedly requires that a representative executive should be established, for the purpose not only of continuing the functions of the committee, but of effecting many other important objects which were not originally contemplated, or which, rather, have been placed in abeyance by the promise made to the general practitioners of the immediate grant of a charter of incorporation, with an Act of Parliament to carry out its provisions.

Secondly,—The representative council of such an institution would be a protective body; they would be enabled to perform many duties, the object of which would be to protect the interests of the legally qualified practitioner, and of the public. Among other important duties which might be imposed upon them, is that of publishing annually, in the absence of any legal registration, a registry of the qualified practitioners in actual practice, and thereby of virtually exposing the pretensions and practices of unqualified persons; and in this respect they would give facilities to the exercise of the power vested in the hands of the Society of Apothecaries, of prosecuting those

who render themselves amenable to the law. (Hear, hear, applause.)

Thirdly,—This representative council, possessed of the confidence of the profession, would have it in their power not only to encourage the Apothecaries' Society to prosecute their duties with increased zeal, and to continue to elevate rather than depress the character of their examinations, but it would also be incumbent on them to watch vigilantly the curriculum of education for the member of the College of Surgeons—the individual who is afterwards to become a general practitioner—and if the standard of qualification for the membership should be insufficient to secure his efficiency to practice surgery as a general practitioner, to appeal from time to time for redress of this or any similar grievances from the legislature.

Fourthly,—A National Institute of Medicine, Surgery, and Midwifery, if undertaken with spirit and properly supported, would have it in their power to publish "Transactions" periodically. These Transactions would comprise all that is going on in the profession, political and scientific, essential to be brought immediately home to the doors of the general practitioners; and they would be a means of internal communication between the central council, the honorary local secretaries, and the members of the branch associations, which must prove of incalculable utility to the profession at large.

Fifthly,—The National Institute might immediately commence the formation of a library. It is quite true that at the present moment there are several very valuable public libraries, but not one of these is placed upon a footing which renders it eminently serviceable to the general practitioner. The library of the College of Surgeons can only be resorted to by personal attendance at the College; but it is totally impracticable for the general practitioner in actual practice to leave his home for literary pursuits. The library of the Medical and Chirurgical Society is conducted upon the most liberal plan, but this society only admits a certain proportion of general practitioners; and altogether there can be no question, considering the great increase of numbers in the medical profession, and the daily increasing facilities of transmission, that the general practitioners might commence the establishment of a library for general use and circulation, which would ultimately prove of inestimable advantage to themselves and their successors. (Hear, hear.)

Sixthly,—If a National Institute of General Practitioners in Medicine, Surgery, and Midwifery, were to commence the formation of a museum, there can be no doubt that a collection of the most valuable kind would be rapidly made; one gentleman has stated that he should be prepared to deposit at once, as a nucleus, a collection by his own hands of 3,000 specimens in natural history. Other gentlemen have lamented that there is no institution which they can call their own, in which might be deposited collections and isolated specimens. The labours of the general practitioners in the metropolis and throughout the provinces, and their extensive resources, are rendered unavailing and nugatory in the cause of medical and general science, just in proportion as they are deprived of encouragement by exclusion from that position in the profession which they claim, and to which they are so justly entitled; and if their energies were enlisted by engaging as a body in such an institution, voluntary or otherwise, there can be no doubt that medical and surgical science would immediately receive a very great impetus.

Seventhly,—A National Institute might at once establish prize essays and examinations on specific subjects to be conducted in public, which must conduce to the advancement of medical science. The Institute would also promote the friendly communication of its members with each other—tend to destroy those jealousies which have too frequently exhibited themselves in the present dissociated state of the profession, and would lead to the establishment of a well understood, consistent, and liberal although not fastidious, code of medical etiquette—essential not only for the honour and comfort of the profession, but for the safety and welfare of the sick.

Eighthly,—If the members of the profession, practising on the broad principle that medicine and surgery are one science, were thus to form themselves into a National Institute of Medicine, Surgery, and Midwifery, it would constitute the frame work of a corporate body, ready prepared, should the Right Honourable the Secretary of State change his present intention on the subject of medical legislation; and redeem his original pledge; and it would be the duty of the council to use every legitimate means to urge from time to time upon the legislature and the Government their claims for a charter of incorporation, and for such an Act of Parliament as would secure to the public a high standard of qualification for every individual who is allowed by law to practise medicine and surgery, and to the profession at large those rights and privileges which they have so long contended for.

These are a part only of the advantages, as appears to the committee, which would accrue to the general practitioners by forming themselves into a permanent collective body; and in throwing out this suggestion to the meeting, the committee cannot do better than to quote a part of the 30th and the 31st clauses of the "Manifesto" issued by the Medical and Surgical Association of the Borough of Marylebone, a few weeks before the National Association came into existence.

Clause 30.—"The position of the general practitioners of this country is at present most anomalous. They are acknowledged as practitioners of medicine alone, under the Apothecaries' Act. They have hitherto been recognised as practitioners of surgery alone, by the College of Surgeons; neither the Apothecaries' Company nor the College of Surgeons know them as general practitioners of medicine and surgery. Although an indispensable professional body, numbering perhaps fifteen or eighteen thousand, possessed of incalculable individual influence, they are unknown as a collective body." (Hear, hear.)

Clause 31.—"The first step towards procuring a prompt and efficient remedy for the evils that afflict this large and important class in the profession, the anomaly of position, the defects in education,—the want of defined privileges and protection, is unquestionably for the great body of general practitioners in the kingdom to combine and to form a society of their own."

The committee do not bring a scheme of this magnitude and importance under the notice of the meeting without having well considered the difficulties which surround such an undertaking. They are fully aware that if the meeting should hail it enthusiastically, and in the most cordial spirit determine unanimously at once to invest a committee with power to carry it into effect, its success must still be problematical. For the purpose of carrying out all the above objects, a very large annual sum would be required; yet, if from five to ten thousand general practitioners were to act so far in concert as to subscribe a small sum each annually, a very large yearly income would be derived; and the committee are so convinced of the innumerable advantages which would accrue to the profession by thus combining together under a representative institution, that they have felt that they should not do their duty if they omitted at this juncture, thus publicly, and thus forcibly, to place the matter before the meeting.

The committee beg it may be understood that they do not recommend any speculative proceeding. The utmost they can advise is, that if the meeting concur with them in their views, they should resolve that it is expedient to form the National Institute, and that they should invest a body of individuals, in whose judgment and discretion they can place reliance, with power to make the effort; nor do they wish it to be understood that they expect an institute in all its departments and ramifications could be accomplished at once—it must be a work of time. They apprehend the proper course would be to employ the machinery of the National Association for the purpose of canvassing the members and the profession generally, by circular letters, to ascertain whether they are desirous of entering into such an undertaking. If they are not disposed to do so with zeal, and even with enthusiasm, or by some other means to maintain an effective organisation, all amelioration of the condition of the general practitioners is hopeless. It would be unreasonable to expect that a few individuals could give the time and attention required, and subject themselves, even in a great public cause, to the anxieties and responsibilities which must necessarily be engendered, unless they receive the encouragement and assistance of a very numerous body of the profession.

An indispensable requisite to the permanent establishment and efficient working of such an institution, is undoubtedly that the utmost confidence should be reposed in its executive council, and particularly in those upon whom the duty may be imposed of carrying the wishes of the profession into effect in the first instance. If the constituency cannot accord this—if the medical profession is of so jealous a character that it can repose confidence no where—if, during the discussion of the most serious negociations and the transaction of the most important business, parties inimical to the interests of the institution are to be present in the council-room, public meetings to be clamorously called for, and an exposition to the public of the state of business, before that business is complete, is to be pertinaciously demanded—if, in the executive council, where the interchange of opinion should be free as air, gentlemen are to be over-awed by misrepresentations of their acts and motives (applause, protracted during several minutes), the committee state that the establishment of an institution of any permanency or importance is totally impracticable. The committee are fully aware that the profession has great cause for suspicion arising out of the manner in which it has been treated by self-elected councils; but it should be borne in mind that an institution in the medical profession on a liberal representative principle, would be placed under far different circumstances, and that there must then be a day of account for the executive, whatever its conduct may be.

After the most patient deliberation and re-discussion of every point, it is the opinion of the committee that the NATIONAL INSTITUTE should be founded on the basis of the "Heads of Charter" already sanctioned by the Association, viz.,

As respects qualification for membership, that it should embrace, in the first instance,

"Gentlemen who were in actual practice previous to the 1st of August, A.D. 1815.

Licentiates of the Society of Apothecaries.

Members of the Royal College of Surgeons in England, Ireland, and Scotland.

Doctors or Bachelors in Medicine of any university of the United Kingdom, and Fellows or Licentiates of any College of Physicians of the United Kingdom who shall have been in actual practice as general practitioners in medicine, surgery, and midwifery, or who shall satisfy the council of their qualifications to practise in medicine, surgery, and midwifery, and who are at present Members of the National Association, or who shall enrol themselves previously to the expiration of six months from the date of the formation of the Institute."

Subsequently—

"Such persons only as shall satisfy the council as to their qualification to practise in medicine, surgery, and midwifery."

That its government should be—

One president, "to be elected by the council triennially, and eligible for re-election."

Three vice-presidents, to be elected by the council from their own body by ballot, one to go out every year, and not to be eligible for re-election for a year.

A council, "to be composed of forty-eight members, one half practitioners resident within ten miles of the General Post-office, the other half country practitioners resident beyond that distance. No member of the Institute to be eligible as a member of council under —— years from the date of his qualification to practise.

"The council to be elected by the members of the Institute; every enrolled member to be entitled to a vote.

"One-third of each metropolitan and provincial branch of the council to go out of office annually, and the vacancies to be filled up in equal proportions from the respective branches, but the retiring members not to be eligible for re-election for a year.

"The election to be by voting papers, and decided by a majority of votes.

"The council to prepare a code of laws for the regulation of the affairs of the Institute, subject to the approval of a general meeting of the members."

In drawing up the present report no attempt has been made to embrace the whole case of the General Practitioners. The committee believe, however, that the claims of the profession as respects general practice must be laid completely before the public; that the proper place to do this efficiently is the floor of the House of Commons, and that the appropriate time is approaching. The committee cannot conclude without alluding to an additional injustice towards the general practitioners recently attempted in the "Hunterian Oration" at the Royal College of Surgeons (applause), and, although the past history of that body might lead them to evince little surprise at any step taken by the council of the college for their own exaltation, the committee were, nevertheless, scarcely prepared for the wanton and unjust accusations which the individual who delivered that oration thought fit to bring against his professional brethren. The attack was sure to produce fresh agitation in the minds even of the most peaceable. It was unjust, because, both in precise and general terms, the orator imputed to the general practitioner—his co-equal in rank, by virtue of his examination—(Great applause)—an inferiority of attainments; omitting what is due to the members of the college and to the great mass of the profession, with all that is essential to put the merits of the medical question fairly before his hearers. The oration was calculated to mystify the public still further upon the subject of medical politics, and the presence of a large assembly of influential members of the community (not of the profession) was selected as a fit occasion to promulgate the libels which it contained—(applause)—perhaps in the hope that what the cause wanted in truth and justice might be supplied by violence and harshness of language, tone, and manner. In the many difficulties which have beset the committee in the discharge of their complicated duties, it has been their endeavour, as as well as their desire, even under circumstances of great provocation, to express themselves mildly towards their opponents; the circumstances, however, to which they now refer are such, that, as the representatives of a great proportion of the profession, as well as in their own persons, they feel that they would depart from their duty if they did not, in the strongest and most unequivocal language, express their disgust at the attempt made upon the occasion alluded to, to mislead the public upon the subject of medical competency, to degrade the qualified practitioner, and seriously to impede the progress of medical education. (Applause.) Without dwelling further upon this topic, the committee will conclude by remarking that, as respects the consulting surgeons, a large portion of their practice is of a medical character—(applause)—for which their professional education by no means necessarily qualifies them; the committee therefore trust that, upon an improved organisation being effected, some early means may be taken to secure such a test of fitness on the part of all persons who practise medicine as will afford adequate protection to the public.

The National Association numbers upwards of 4,000 members, and the committee are justified in stating, that it has exhibited of late, if possible, a greater unanimity of sentiment, and a more consistent firmness of purpose, than at any former period (Great applause). As a great professional body the association has taken its stand in the cause of MEDICAL REFORM. The essence of that reform lies in a high standard of education and qualification for every medical practitioner, an improved social status of the whole profession, and protection to the public against unqualified pretenders. In the theatre of the College of Surgeons, names, great in the annals of surgery, have been invoked to vindicate an illiberal policy, but the profession can appeal to its Cheseldens and Hunters in spite of the College of Surgeons of England. Ages of barbarism could boast of the distinguished names, and, at all periods, the most brilliant examples of human genius have burst through the clouds of ignorance with which they have been surrounded. A characteristic of the present age is the general diffusion of knowledge, and no stroke of policy by interested colleges, nor any efforts of hostile councils, can now be allowed to stem the onward progress of professional knowledge. (Applause.) It has been gravely asserted that, by educating the general practitioner highly in medical and surgical assistance would be thereby rendered *too costly* for the poor, but this is to make learning and science the parents of extortion and inhumanity, which common sense denies; and experience may be appealed to in proof that the better informed and the more competent the members of our profession, the more willingly, considerately, and effectively are their knowledge and skill bestowed upon their necessitous and unfortunate fellow creatures. (Great applause.) The cause in which we are engaged is not that of the rich only, whose wealth can command the assistance of the most eminent men, but it is the cause of the poor and needy, whose daily bread depends upon their health, and who must rely in sickness upon the aid which is nearest at hand and most readily available. It is not the cause of the highly educated portions of the community only, who might be allowed, without charging the law with inhumanity, to choose for themselves between the professor of true knowledge and experience and the arrogant pretender, to whom, perchance, the pleasure may be as great

"of being cheated as to cheat"

but it is the cause also of the vast majority of the community who have no means of judging correctly in matters which they cannot understand—of the helpless infant, whose anxious mother would place its life at the disposal of those who make the highest pretensions—of the female part of the community, who would fall into the hands of boasting charlatans in the most critical moments of their existence, when ignorance may engender rashness, and rashness lead to death. The cause in which we are engaged is that of medical science, and the great medical and surgical interests of this community, and there can be no reason to doubt that, at a period not far distant, a paternal government and a wise legislature will see the humanity, justice, and sound policy of placing the medical profession of this country upon a more consistent, a more substantial, and a greatly improved basis.

The committee having now made their report, and having laid before the meeting their suggestions and plans for consideration, respectfully place themselves at the disposal of the members at large. (Immense and protracted applause.)

Mr. PURCELL, of Winchester, said that he had much pleasure in proposing the adoption of the first resolution; he begged to express, on the part of the medical practitioners in the neighbourhood in which he resided, the perfect confidence which they felt in the committee of the Association. The resolution was as follows:—

"That the report just read be received, entered upon the minutes, and forthwith printed, and that the thanks of this meeting be cordially given to the committee for the zeal, intelligence, and discretion displayed by them in advocating the claims of the general practitioners, and also for the able and consistent manner in which they have endeavoured to carry out the objects of the National Association."

Mr. LIDDLE seconded the resolution, which, he was sure, was one in which all would cordially unite. There could not be any difference of opinion on the subject. They were all deeply indebted to the committee for the pains they had taken, the time they had bestowed, and the talent they had displayed, in all their transactions, and more especially in the very able report which had just been read. He (Mr. Liddle), as a member of the Tower Hamlets Medical Association, was able to bear testimony to the great urbanity shown by the committee on all occasions, and the readiness which they equally displayed to meet all difficulties and differences of opinion in an amicable spirit. (Applause.) At present there is not any medical bill before Parliament; they now start anew, but with this great advantage, that they are already an organised body. He (Mr. Liddle) trusted that all differences of opinion on these matters would cease, and that they would centre their exertions in one common object—that of establishing the National Institute of Medicine, Surgery, and Midwifery. In conclusion, he cordially seconded the resolution.

The resolution was then put, and carried unanimously.

Mr. BEDINGFIELD, of Stowmarket, observed that, when he entered the room, he had not any intention of taking part in the discussion; he had intended to be merely one of the auditors. He had, however, been requested to propose the second resolution, which he had great pleasure in doing. He himself was principally known as having written formerly in the journals on the question of medical reform—a subject he had been induced to take up from noticing the defective condition of the College of Surgeons. He then stated that in early life he had purposed obtaining the college diploma, with the view of entering the medical service of the army, but was deterred by his friends, who pointed out that the diploma of the college was of so little estimation, that the government were not content therewith, but required all candidates for their medical services to pass a second examination before they could obtain commissions. He then settled in the country without the college diploma, and at that time it was estimated so slightly, that four out of five of the surgeons to the Bristol Infirmary were in practice without it, and he believed that two of the surgeons to that institution at the present time were not members of the college. He (Mr. Bedingfield) believed that it was no disgrace not to belong to the college, and whatever merit might have attached to the possession of its diploma had been destroyed by the recent acts of the college council, and by the late charter. He thought that the additional examination for the fellowship was a libel on the profession, which the general practitioner would properly resent by separating altogether from the college, and establishing the proposed National Institute. The advantages that would be derived from the founding the Institute had been so ably detailed in the report, as not to require any comment from him. He regretted much that it was not in existence prior to the passing of the poor-law bill, in which case the advantage that had been taken of medical men would never have been attempted; there was at this moment a scheme on foot for the further degradation of the profession; he alluded to the proposal that government should pay a part of the salaries of the union medical officers, and thus render those gentlemen servants of the crown, and deprive them of their elective franchise and privileges as Englishmen. (Disapprobation.) Mr. Bedingfield concluded by proposing the second resolution, which was:—

That the indefinite postponement of the settlement of the medical question in Parliament, and the consequently unsuccessful issue of the exertions of the committee to obtain a charter of incorporation for the general practitioners, is chiefly to be attributed to the existing colleges having unduly exercised their influence, and thrown unwarrantable obstacles in the way of the Secretary of State for the Home Department; that in consequence an absolute necessity exists for the general practitioners to maintain a permanent collective organisation, with an authoritative council to protect their interests; it is, therefore, the opinion of this meeting that the recommendation of the committee in the report which has just been read, that the National Association should be established on a more permanent basis, be *forthwith adopted*, and that the members of the Association, and of the profession generally, be canvassed as to their willingness to co-operate in the formation of a 'NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY,' on the plan recommended in the report.'

Mr. Bonney, of Brentford, in seconding the resolution, described the necessity of forming the National Institute as much to be deplored, inasmuch as it resulted from the grievances under which the members of the profession laboured, one of the principal being that they had no participation in the management of their own college. The same injustice obtained in the College of Surgeons, in Edinburgh, of which he was a licentiate. The licentiates of that college did not participate in any way in the management of its affairs. Another grievance was that there was not a full and complete examination for gentlemen about to engage in general practice. There was not any examination in midwifery, and if the new institute contemplated nothing more than midwifery, still it would be a great boon to the profession, and consequently to the world at large. But it would be far more than this—far more even than its founders imagine—it will be a measure of peace—because it would be a measure of power —of that readiness to wage war, which is ever the surest safe guard of peace. The arrangements proposed for the exercise of the elective franchise constituted, in his opinion, the nearest approach to universal suffrage that could be conceived, while at the same time it was free from the dangers attendant on political elections, inasmuch as the members of the medical profession were not a mob, but gentlemen of education, not liable to be misled by a factious demagogue—like sheep following the lead of a ram with a bell fastened to his neck. Even those individuals, belonging to the other college, who now stand aloof, would ultimately see that there will be a place in this college which even they might fill with honour to themselves, and he (Mr. Bonney) would be always willing to leave the seats of honour at their board for those gentlemen, if they were willing to occupy them. He (Mr. Bonney) was inclined to look upon this Institute as the nucleus of a National faculty of medicine, in which all qualified practitioners would be registered; and in that case he would wish that none should be afterwards admitted, who could not prove by actual examination that they possessed a thorough aquaintance with all the branches of the profession, every one, however, being at liberty afterwards to practice solely any one particular branch or subdivision of the healing art, which he might feel inclined to direct his attention to. Mr. Bonney then seconded the resolution, which was put, and carried.

Mr. Daniell, of Newport-Pagnell, remarked, that the observations he was about to make in proposing the third resolution, would refer to the provincial members of the association, and not to the metropolitan. He should give his full support to this resolution* for the present maintaining the National Association, as without it the general practitioner would not have a home,—which was certainly not to be found in either the College of Physicians or Surgeons. The National Association is the only institution that could be a home for the general practitioner; that is, providing it met with the support it deserves. (Applause.) There were points constantly occurring in the course of practice, which required that there should be some body for general appeal. For instance, the management of the new poor-law, as regarded medical practitioners; it was lamentable to notice the way in which they were degraded by it. When he (Mr. Daniell) first entered into practice, he had medical charge of five parishes under the old poor-law, at a salary of £100 a year, and he now, under the new system, attended the very same district for £25 a year. It might be asked why he did not give up the parishes; but if he were to do so, there would be others ready enough to take them; and an old-established practitioner did not like to see others riding over the very circuit that he had himself made. If he abandoned the union practice, he would often find his private practice cut up by his successor in the parish surgeoncy. Some means are wanting by which the commissioners of the poor-law may be taught they must not oppress the general practitioner. Mr. Daniell then gave a description of an interview he had had with the income-tax collector, the latter being desirous to surcharge him. On showing the collector his drug-bill, the collector remarked, "why, Sir, a horse doctor would make more of his drugs than you do." "Very true," was the reply, "a horse-doctor is infinitely to be preferred to an union doctor; and the farmers think a great deal more of their cattle than they do of the poor, or even of their own lives, for they pay the bill of the veterinary surgeon with great readiness, recollecting that he has saved the life of a valuable animal, but when their own bill comes in, then it is, "Why, doctor, how heavily you charge." (Laughter.) These are standing truths, and not to be questioned; he (Mr. Daniell) knew them from experience. The National Association, then, should be maintained in full vigor, that it may be a home for the general practitioner, and a medium by which his grievances may be redressed. He (Mr. Daniell) was very solicitous that the National Institute should be established, as he felt convinced that it would be one of great importance and value to the medical practitioner; and he trusted that every member of the profession in the kingdom would unite to give it his support.

Mr. Rogerson, of Liverpool, had much pleasure in seconding the resolution just proposed by Mr. Daniell. He placed great confidence in the committee of the association, and alleged as his reason for doing so, the able conduct which they had evinced in their past transactions. In the management of the affairs of the association they had shown great firmness, tempered with the spirit of conciliation. They were now unfettered by the chains of Government, and rested entirely on the support of the profession, to which he thought they were fully entitled.

Mr. Sparkes said that before the resolution was put he wished to ask a few questions, and offer some suggestions. He had listened to the report with unmixed and unqualified pleasure. He referred to the proceedings of the College of Surgeons at this epoch as being fearful in their consequences, if they were not stemmed by such a barrier—such a bulwark as the National Association. During the whole progress of these proceedings, there had been—he would not say an invidious opposition, but great discrepancy of opinion, and not a few persons looked upon the proceedings of the Association with suspicion, their object being professedly to rally round the College of Surgeons, and make it by suitable reform the alma mater of the general practitioner. Associations had been formed in various parts of the country with that object in view, and he (Mr. Sparkes) thought it would be advantageous to come to terms of reconciliation with those bodies. He wished to see the general practitioners united in one brotherly band of concord, with the sole object of advancing their real interests, and he thought that this might still be attained. Their great object should be to merge all the associations in one great Institute of Medicine, Surgery, and Midwifery, the formation of which was recognised in the first resolution, with which, however, he thought the second resolution did not comport. The continuance of the committee of the Association was not compatible with the formation of the Institute; he would not attempt to disparage their services in the least, but still he would prefer that there should be formed that evening the provisional committee of the National Institute, and that the gentlemen constituting the committee of the National Association should be appointed the members of this provisional committee. If they all combined together, they might yet induce the Secretary of State again to take up the subject, and provide them with a proper home by legislative enactment. He did not like to propose an amendment; he was quite satisfied with the principles of the resolution, but he should prefer the appointment at once of the provisional committee.

Dr. Webster, of Dulwich, explained that the meaning of the resolution was, that the committee should continue for a short time, and then merge into the National Institute. The next resolution exactly embraced the views advanced by Mr. Sparkes. He (Dr. Webster) congratulated the meeting on the character of the report, which was of such a nature as to afford unqualified satisfaction. The proposed institute is on a scale of the greatest liberality. The throwing open the College of Surgeons to the general practitioner was a step that would not be taken during the life-time of the present race of medical men, and latterly even greater degradation and insult had been heaped upon them, because they were taking steps to obtain medical reform. He (Dr. Webster) saw many of the associated surgeons around him, and he knew that the committee of the association would be happy to unite with them. He thought it was doing an injury to the profession to assume that the College of Surgeons could ever be made the home of the general practitioner; they would always be regarded there as a degraded class. He concluded by stating that a deputation from the associated surgeons had been received by the national committee, on the subject of amalgamation, and he believed that the same spirit now animated the other associations.

Mr. Bowker remarked that he kept a shop, and was not aware that he was in any way degraded by so doing. He had acquired in that way an amount of professional knowledge, which no hospital attendance could ever have afforded. If this association were to fail, where should he and such as he, look for protection and sympathy. He could not find it any where, but was held forth as degraded and wanting in the requisite mental qualifications, although probably as deeply read in nature's book as those who take a higher rank. He concluded by speaking highly in favour of the committee, and saying he would afford it his utmost support.

The resolution was then put from the chair, and carried—

Mr. Woolridge, of Southampton, in proposing the fourth resolution, said he had every reason for claiming the indulgence of the meeting. He must, however, detain them while he said a few words on the resolution entrusted to him. He would first read the resolution.

Resolved "That the committee of the National Association be requested to continue their functions for the purpose of carrying out the two last resolutions, and that a future public meeting be called, as soon as the committee may be prepared, to receive a report from the committee of their proceedings, and of the opinions of the profession on the formation of a National Institute of Medicine, Surgery, and Midwifery." Some gentlemen at Southampton objected to the name of general practitioner, and on their behalf, knowing as he did their feelings on the matter, he hailed with pleasure the alteration in the name of the proposed institution. On Wednesday evening last they met in full number, and passed a resolution to the effect that they would assist the committee of the National Association to the utmost in carrying out their views; and at that meeting also they subscribed liberally to aid the Association. His friends at Southampton thought, however, that the surgeons should either be restricted to surgical practice alone, or be compelled to undergo a medical examination. At present he believed there was no difference between the practice of a London physician and that of a London surgeon; the latter attended medical cases as much as the former. Much had been said by different parties about dispensing being degrading to the general practitioner. The idea was ridiculous. Medical men in villages must send out their own medicines, and he believed that even in London many of the purest gave physic.

Mr. Miles Beale, was a member of the city of London Association, and as such, would give his most cordial support to the resolution on their behalf. He was quite sure that the members of the City Association would most cordially rejoice

* "That it is expedient that the National Association should maintain its present position, that it may be prepared to act in any emergency that may arise, and be ready to avail itself of every suitable occasion to urge upon the legislature the pressing necessity, on public grounds, of a revision of the laws affecting the medical profession; and also as a numerous and important collective body, that it may exercise all the means at its disposal to produce a satisfactory settlement of the complicated question of medical reform."

in the continuance of the committee of the National Association; they would feel that it was the means to the attainment of the great end in view—the National Institute of Medicine.

Mr. Cooper, before the resolution was put from the chair, wished to say a few words. He must remark that most unfortunate dissensions had existed, and still did exist among the members of the medical profession. He thought that steps might be taken to arrange these differences, and he had no doubt that by a little forbearance on the one side and a little forgiveness on the other, everything might yet be satisfactorily arranged. The profession had need of all available support, and in an emergency like the present should act as one man. He thought that if the resolution could be altered a little, as Mr. Sparkes had suggested, by the alterating their title to that of "provisional committee with power to add to their number," much in the way of conciliation might be effected.

Mr. Clifton was so fully convinced that these sentiments animated the committee, that they would instantly adopt the suggestion.

Mr. Sparkes expected to have seen a gentleman present, who was known to the profession more "as a critic than as a practitioner." That gentleman must feel the necessity of conciliation. (Cries of "he is present," "Wakley," "Wakley." "No, no, no," and "hisses.") He was satisfied that if the alteration which had been suggested, and which was agreed to by the gentleman who had just spoken, were carried into effect, much of the difficulty of conciliation would be removed.

Mr. Clifton thought his friend had entirely mistaken the question; this committee was only constituted in order to take into consideration the sentiments of the profession: and it had been always intended that the profession should choose their own council to conduct the affairs of the Institute. It was, therefore, not as any compromise for the future, but merely to obtain the sentiments of the profession, that the committee had consented to the proposed arrangements.

Mr. Wooldridge wished to make a few observations respecting forbearance. The committee had shown abundance of forbearance, and he thought they should proceed at once to business. He was prepared, together with his colleagues, to support the Association with purse and person. He thought that all conciliation and forbearance should come from the other side.

Mr. Davis, of Hampstead, thought that for the Association to forbear after all the insult and injury heaped on them would be only to expose themselves to further scorn and obloquy. They had been members of the College of Surgeons, and they were deprived of their standing and rank in society by the self elevation of their equals into superiors. They had been called geese—for his part he had been a goose to be plucked by that very man, and that man the son of a respectable general practitioner. He (Mr. Davis) had known his father well, and he had known Mr. Lawrence, too, when he was his father's dispensing assistant. What had raised the gentlemen of the council so high, that they should turn round on their former equals, and tell them so disdainfully they were only fit to minister to the ordinary exigencies of surgery? What had made them better surgeons than themselves? Was it cutting into the bladder and finding no stone? Was it leaving stones between the ends of the bone in compound fracture? He, Mr. Davis, had had seen a document which had given him much delight. The medical staff acting in the recent war in India had been thanked for their services: were these gentlemen to come home and be told they were no surgeons at all? Did Mr. Keate mean to tell him (Mr. Davis) that he was no surgeon? Did Mr. Keate mean to say that his own uncle was a fool or a rogue? Mr. Keate's uncle had told him (Mr. Davis) that he was a surgeon fit to serve in any of her Majesty's regiments. Did Mr. Lawrence mean to say that Mr. Abernethy was unable to decide on his (Mr. Davis's) competency to act as a surgeon? Mr. Davis was of opinion that to attempt conciliation with the College of Surgeons would be the extremity of folly.

Mr. Bowling, of Hammermith, said that, if he understood the meaning of forbearance, it applied not only to public bodies, but to individuals. There was something in the report which he objected to—it was a personal matter. He thought all individuals should be taken into consideration. The committee should have every support, and he hoped no private animosity would interfere to prevent it.

The resolution, as modified by the committee, was then put from the chair, and crried as follows:—"That the committee of the National Association be requested to continue their functions as a provisional committee, and with power to add to their numbers, for the purpose of carrying out the two last resolutions, and that a future public meeting be called, as soon as the committee may be prepared, to receive a report from the committee of their proceedings, and of the opinions of the profession on the formation of a National Institute of Medicine, Surgery, and Midwifery."

Mr. Fuller rose, and said that, if any one resolution more than another required unanimity, it was the one he was about to read.

Resolved:—"That this meeting is fully sensible of its deep obligations to the Society of Apothecaries for the enlightened policy with which the society has striven to create and maintain a high standard of qualification for the general practitioners; that this meeting highly applauds the conduct of the society during the recent discussions on medical affairs, also for their recently expressed determination to put in force the provisions of the Act of 1815, against unqualified practitioners, and it desires to convey to them the best thanks of this meeting for their able and disinterested advocacy of the claims of the general practitioners of this country."

Many of the gentlemen present could, he (Mr. Fuller) had no doubt, remember the state of the profession previously to the passing of the Apothecaries' Act; it could not be expected, however, that every one should know its benefits, but every one well knew what was due to the Society for the exertions they had made to raise the standard of medical education. They (the Association) should take example by that Society, and pursue their object with the same disinterestedness and the same devotion that the Society of Apothecaries had pursued their elevation. Labour and perseverance must lead them to the goal.

Mr. Martin, of Reigate, had great satisfaction in seconding the resolution. He was an old practitioner, and could remember the state of the profession before the passing of the Apothecaries' Act in 1815, and he could bear testimony to the advantages the profession had derived from it.

The resolution was put from the chair, and carried with considerable applause.

Mr. Nussey with pleasure asked the meeting to adopt the resolution he held in his hand; it was a resolution in favour of the honorary secretaries of the Association, Messrs. Bird and Ancell. (Great applause.) He would read the resolution. "That this meeting desire to record their unfeigned and grateful thanks to their honorary secretaries, Messrs. Bird and Ancell, for the devoted zeal and ability with which they have discharged the important duties devolving upon them; and although, in the opinion of this meeting, it would be impossible to express in adequate terms the obligations conferred upon the profession at large by their disinterested and efficient exertions, yet they are anxious to express their unabated confidence and cordial approbation as well as their high appreciation of the services rendered by those gentlemen."

(Whilst reading the resolution Mr Nussey was several times interrupted by unmixed marks of approbation.) No public body had ever before been blessed with such zealous functionaries as the honorary secretaries of the National Association. In the two all the requisites were combined. Thanks were but a poor return for services such as theirs, and he hoped that whatever the fate of the institution they were about to form, the profession would confer some more substantial mark of their gratitude on those who had given their time and talents so devotedly to its service. (Great applause.)

Mr. Bowling could not speak too highly of the zeal and merit of the honorary secretaries. The report read that night was sufficient proof of their talent. He seconded the resolution.

Mr. Bonney said that a great change was about to take place, and many of the gentlemen sitting in the audience part of that meeting would by and bye be sitting in the council. These gentlemen would then have an opportunity of appreciating the talent and zeal with which the honorary secretaries smoothed all the difficulties in their path. The meeting would allow, that although the most ungenerous attacks had been made on the committee generally, and especially on the honorary secretaries, they on the other hand, had been ambidextrous, and had repelled those attacks. With such zealous officers he hoped they would convert the opposition which had been shown them into a means of support.

The resolution was put and carried with great applause.

Mr. Clifton hailed with pleasure the unanimity which had prevailed that evening as a good omen of future success. He trusted all would join heart and hand, and use every exertion to carry out the objects of the Association. He had to beg their attention for a few moments to a resolution he was sure they would receive with pleasure. He would read it—"That the thanks of this meeting are due, and are hereby given, to our highly respected president, for his zealous attention to the interests of his professional brethren, during his presidency of the National Association, and also for his able conduct in the chair on this occasion."

He need only refer to the manner in which the chair had been filled that night to show the claims of the president to the thanks of the Association.

This resolution was carried by acclamation with great applause.

TO CORRESPONDENTS.

Mr. W. H. P. *imposes on us a difficult task. Mr. J. Churchill has been active as a publisher, but must be so engaged now in winding up the affairs and ending the litigations of the numerous unsuccessful railway companies of which he was a provisional director, that he may possibly not have the leisure necessary for so peculiar and responsible a work as that designed by our correspondent. But we forbear an opinion. The other medical publishers are Mr. Renshaw, in the Strand; Mr. Baillière, of Regent-street (who has the advantage of a large continental connection); Mr. Highley, of Fleet-street, who is still in business; the Longmans, of Paternoster-row; Simpkin and Marshall; Sherwood and Gilbert, &c. Mr. VanVoorst is the principal publisher of books on geology, physiology, and comparative anatomy. Our correspondent is further informed that it is against our rule to address private notes answering questions of the kind above proposed to us.*

Blue Jacket.—*One of the articles will be found in Dr. Williams' Course of Lectures on Medicine; the other, probably, in some notice of a surgical book on the subject. Our correspondent is referred to the* Indices *of the* Medical Times.

A Retired Surgeon *mentions a very important fact about which we should be glad of further information. Sir Robert Peel's measure will undoubtedly place the medical officers of unions in a better position—how much so we are unable* yet *to say.*

Justitia.—*The operation is the* setting *whence the hours specified commence to run. We doubt the legal validity of the claim.*

M. D. (a Subscriber) *must excuse our non-publication of his letter. A meeting of thirty persons, of whom, at least, ten attended, like our correspondent, to observe and report progress, requires no such prolonged notice. The only strange feature was the presence of one gentleman who appears to hold his person and position a* little *too cheap. As of the toad inclosed in stone we may say with Pope—*

> The thing we know is neither rich nor rare
> But wonder how the d——l it got there.

A Reader.—*The manual of Guy.*

X. Y. *is declined, as also several other correspondents.*

Many papers have been received which we cannot use.

THE MEDICAL TIMES.

SATURDAY, APRIL 25, 1846.

"Forti et fidele nihil difficile."

NEVER was it better evinced than on Friday last that a cause may gain as much by factious and unprincipled opposition on one side, as by moderate, firm, and prudent support on the other. The great meeting of the National Association was one continuous triumph to the Committee and Honorary Secretaries. The objects for months of declamatory vituperation in shadowy Associations without members, and death-stricken journals without readers, the members of that Committee called a public meeting of the Profession to decide between them and their accusers. The assailant was present—the man who had maintained for years—thank heaven, it is no longer maintained!—a reign of moral proscription over the Profession. The accused Committee took the highest ground; they claimed not pardon, nor indemnity, but gratitude and support; they indignantly repelled accusation; met insinuation and invective with a virtuous and haughtily-expressed contempt: their vindication was the brief, proud, and contumelious retort of firm-seated virtue bearding noisy unprincipledness. The result? The meeting "applauded them to the echo" that did "applaud again." And the assailant? Abashed and cowered, he hung down his recreant head, his accusations abandoned, not one word dared—not even in his own exculpation. It was, indeed, a shocking sight, and adds one striking leaf more to the annals of retributive justice. Sooner or later—it again comes out—the public—supposed so blind—will not fail to mete out to each his deserts. The fact deserves emphatic chronicling. Though personal, it has the utility of a general application.

While the Committee's vindication of their past conduct is thus offered as a triumph, their programme of future operations will be accepted as not less satisfactory. The chief interest, of course, centres in the proposal of a new Institute of Medicine.

Our readers will remember that we have long pointed to this as the inevitable result to which the madness of the Council of the College of Surgeons must lead us. We foresaw, from the moment they stopped short in the improvements they designed, and we were authorised to announce for them, that their doom was sealed as a national institution, and that the Profession would ultimately be roused—nay, compelled—to take a decided course of their own, and that the steps which then looked extravagant, as improbable, would, in the course of a very short time, be adopted universally as the suggestions of a most judicious policy. The consummation so much desired by us—so little expected by many—is now before the public. It is forced on our acceptance. We have no choice but to adopt the boon. The National Association *could* do nothing worthy of itself but propose the New Institute of Medicine and Surgery; and the Profession can do nothing not dishonourable, pusillanimous, and unwise, save by accepting it. The new measure is the new necessity of our position.

The Committee have done most wisely in bringing forth the project in the *deliberative* fashion announced in their report. It is a vast design, and if the new institution is to have any permanence there must be no hasty, frostwork architecture. It is a thing not to be accomplished by the quick legerdemain and active trickery which have been so currently mistaken for wisdom by the managers of other Associations. All must be done thoughtfully, carefully, honestly, fearlessly. The building must be begun from its foundation, and before beginning, we must be sure that we have not only the plan, the architect, and the workmen, but also a complete supply of the materials. We must have no commencing and leaving off half-way. We must not begin without being sure of ending. What makes this prudent course the more eligible in this instance, is the fact that success can only be precluded from us by our own fault. All its elements are in our own hands—and just as one premature step might ruin all, a succession of prudent ones must secure all. It is to be recollected, too, that the duties which are to win the ultimate triumph do not rest wholly on the Committee. These gentlemen are of no force save as the instruments of a large and active body of professional brethren. Like ambassadors at a foreign court, they are strong, not in their own strength—influential individually, as they may be—but in the strength of those they represent. Well supported, they may fail; but ill-supported, they are certain of defeat.

Wisely, therefore, after enunciating the *important proposition that the Profession should organise its own college*, do they decline to take one compromising step towards its establishment, till they ascertain in what degree and to what extent they can count on effective co-operation. In their own words—

"They apprehend the proper course would be to employ the machinery of the National Association for the purpose of canvassing the members and the profession generally, by circular letter, to ascertain whether they are desirous of entering into such an undertaking. If they are not disposed to do so with zeal, and even with enthusiasm, or by some other means to maintain an effective organisation, all amelioration of the condition of general practitioners is hopeless. It would be unreasonable to expect that a few individuals could give the time and attention required, and subject themselves, even in a great public cause, to the anxieties and responsibilities which must necessarily be engendered, unless they receive the encouragement and assistance of a very numerous body of the profession."

In the very proportion in which this "encouragement and assistance" are necessary are we hopeful of their extension. It is quite right that the Profession should not have the fact blinked to it—as is customary with some associations—that its energetic aid is a *sine quâ non*. Medical men have never been known to shirk a labour because it appealed to them in the shape of a responsibility. Bring home to them a sacrifice of time or money as a personal duty and social obligation, and you are sure that it will be made, and when the Committee tell their brethren frankly, unless it be your will to approve and aid our design, we shall not feel justified in undertaking the labour, they make an appeal for co-operation, sure—or we mistake—of a hearty and general response.

The strictures of the Report on the unfortunate Surgical Council were as justly severe as they were abundantly called for. The meeting was loud in its cheers of the few caustic sentences. In the council chamber the feeling expressed on this evening should awaken lively sentiments of shame and uneasiness. As it is, some of the better-mannered Councillors are said, even in social life, to shrink from facing their injured fellow members. They feel a becoming difficulty in looking into the eyes of those whose trust they have betrayed, and whose credit they have infringed.

The liberal standard the Committee adopt for regulating the question of membership of the "Institute," seems to us most judicious. In medical politics we must give and take; and if we aspire to legislate on exclusive principles, we *aim* not to comprehend in our scheme more than a section. The basis of the medical structure cannot be too broad, consistently with our existence as a profession. After ensuring the incorporation in one establishment of every legitimate practitioner, we may then enter on a discussion of grades, and classes, and distinctions. Before that be done, it is only so much waste of argument and useless dissension.

The preservation of the Association, independently of the project of the institution, is not only proper but essential. The Committee of the Association must launch the new vessel, and, till its seaworthy qualities be tested, it would be most unwise to abandon the craft that has more than once so gallantly weathered the storm for us. There is no wisdom in being off with the old love before we are on with the new.

Malorum immensa vorago et gurges.—CICERO.

Qui dit docteur, ne dit pas toujours un homme docte, mais un homme qui devroit être docte.—ST. REAL.

TOWARDS the close of the sixteenth century, lived an enthusiastic fellow, in Ancona, named Horace Augenio, who adventured a couple of experiments in physic, that took amazingly with the people. Knowing, as all sagacious men do know, that if you are to get rich by a novelty, it must be by one that is very unmistakeable in its pretensions, he dashed randomly at a remedy, as dirty as it was deceptive, and got his pockets well filled for his artifice. He wrote a book of medical epistles and consultations, in which he vaunted the curative virtues of millepedes in vesical calculus. The strangeness of the remedy, and the strong faith he affected to place in it, would no doubt have won the confidence of the multitude, but he preferred catching hold of their credulity with an instrument not likely to lose a victim, having once fairly hooked him. This instrument was a TESTIMONIAL. Its donor gravely declared, that, for a certain length of time, he was the subject of stone in the bladder; that he consulted physicians of eminence who vainly endeavoured to relieve him; and that he was at last condemned to an operation as the only

chance of having his life saved. Hearing, however, of the fame of Augenio, he submitted himself to the skill of this wonderful man; and, after having been well dosed for some time, with his marvellous millepedes, all symptoms of stone vanished, and he was once again as hale and hearty as he had ever been. Personal avowals, that are founded upon personal experience, are very difficult to contradict and hence, if they are given boldly, and with a liberal sort of colouring, they rarely fail of making plenty of believers. So it was in the case before us: the man said he had been cured of calculus—and of course he ought to know—and the public placed implicit belief in his statement, without ever pausing to weigh the possibility of his having been paid for giving utterance to a falsehood. One might almost be induced to consider such public as somewhat unique in foolishness, did not our own more enlightened age furnish examples of folly, much more conspicuous and contemptible than theirs. Experience has done nothing towards lessening the tendency to this voluntary delusion—hecatombs of victims have testified to the danger of credulity in physic, and yet their crazy followers are not deterred from plunging themselves into the same vortex of ruin. An impostor has only to announce that he can cure consumption, or cancer, or any other ailment that his fancy may hit upon and forge a few notes purporting to come from individuals upon whom his miracles have worked, and, forthwith, he has followers in good plenty who are ready to pander to his impertinence and villany with their last shilling! Only let him have capital enough to command a nook in some newspaper of fair circulation, and the money he expends in advertisements will be returned to him a hundred fold!

I revert to our hero—the value of his remedy was established at once—it cured everything that came before it—and, at last, died a natural death, at a good old age, after having rewarded its discoverer with a more than moderate fortune. It will be remembered, that, a few years back, this piece of empiricism was attempted to be brought into fashion under the pretext of its novelty. It was only a revival of an old system of robbery which had slumbered for more than two centuries, and was again introduced to the living world to enact its roguery afresh. It answered not unprofitably, but less fully than of yore; and was at last condemned to a second death, but only to give place to other imposition in the same line, as worthless, and even better rewarded.

Augenio's other secret remedy was for worms. He performed many extraordinary cures with it, and was, consequently, a large gainer, both in reputation and pocket. It was at last found to consist of water, which had been boiled in contact with mercury, whose oxide, if any were present, might impart some little activity to the water. Strangely enough, directly that the nostrum was known, its charm was dissipated, and it failed to be as curative as aforetime. By degrees it fell into disfavour, and at last left the market altogether. Some few years back this same remedy was revived by a lady, who ushered it into the world as something new. Scammony, jalap, calomel, turpentine, and other such things, were inert compared with it—desperate cases, that defied *them*, yielded readily to *it*, and a tœnia or a lumbricus had no more chance with it, than a trout, well-hooked, would have had with Isaac Walton. Gradually it lost its power, then its popularity, and finally, the people found wisdom enough to inform themselves that it had most egregiously deceived them. We should not wonder, however, to see it some day revived again, with plenty of fresh credulity to feed upon.

Guy Patin, who reached the height of his popularity about the middle of the seventeenth century was a man of great ability, erudition, and medical knowledge. This fact was well known, but it stood him in no service, for of the thousands who applauded, not one employed him. At last, the crotchet seized him to write an abuse of antimony. Under the title of "Antimonial Martyrology," he published a book, in which he levelled a volley of invective against the drug, and backed up his prejudices with a record of numerous cases in which it proved hurtful. There can be little doubt that he was as incompetent as he well could be to the task he took upon himself, but it gave him what the world considered a *practical position*, and forthwith he was ranked amongst the fortunate number of *practical men*. Never was a deception worthier of being laughed at. Patin wrote nearly forty works in French, Italian, and Latin; and yet, it would have puzzled him to have diagnosticated a case of small-pox, or to have distinguished, precisely, a common cold from a consumption. "There is a tide in the affairs of men"—there was one in the life of Guy Patin—he took "the current when it served"—and the "venture" was not lost to him! Such has been the unworthy fate of many a man since his time. Often has a thickhead, in a prodigality of invective, raised himself into repute by a wholesale denunciation of some particular drug. Salmon "put money in his purse" by telling the people that fox-glove would cure consumption; but many more have been yet better rewarded for saying that fox-glove would do no such thing. It would be interesting to know how many fortunes have been made by praising and persecuting mercury! It has been a target for medical sharpers to shoot at ever since Paracelsus took it under his patronage.

An old rule, in a favourite game of cards, tells you, when in doubt, to "play a trump." This suggested a trick that Curran had, of quoting Latin when he fell short of English. So it is in physic—do something to distinguish yourself, no matter what—get your name up, and you will get your fortune! We blush when we say that the phrase has some truth in it. Make a book—if you can, by writing something up; if not, by writing something *down*. *Sic itur ad astra.*

Sylvius was not a quack at heart, but he was one day seized with a fit of prejudice in favour of the doctrines of Van Helmont, and forthwith he began to prescribe only according to the suggestions of chemistry. A certain personage was so profoundly skilled in a certain science,

> "That he could tell what time o' day
> The clock would strike, by algebra."

So it was with Sylvius. He conceived sundry notions about acids, and alkalies, in the system; and according as one predominated, he prescribed the other. He made such a fair show of reasoning upon the matter, that many were converted to his faith; and not a little was rational pathology retarded by the absurd fancy that the living machine was nothing better than a laboratory. The dogma had its day, and then fell into discredit. We are not without our fears, however, that something like his old folly is being revived amongst us. The daring theories of Liebig have attracted many disciples to them, and those of the junior school, who are wanting in bedside experience, now affect to make up for legitimate pathology, by bits of coloured paper, and a few little bottles and test-tubes. There is nothing too dirty for this race to do. We remember the time when a practitioner was satisfied with seeing fæces, and smelling them; but this does not half satisfy the modern school of chemical pathologists. They will poke test-paper into a night-chair, and rejoice in dirtying their fingers; and gladly carry home a fragment of the filth, to see how much fat may be in it! All this, they solemnly declare, is essential to a correct knowledge of the disease; and mightily gratified, of course, is the patient, in the thought that even the unworthiest part of him commands such serious attention! Urine, again, has lately become as valuable as if sticks of phosphorus were found ready-made in it; and, in the hands of some men, it is a talisman of such certain power, that it constitutes a regular "open, sesame," to any disease the body may be labouring with. This toying with chemistry we have curiously watched for some time past, and are only anxious to know how long it will be before the absurdities are all exploded, and the legitimate services of the science made properly and unpretendingly available in the business of the bedside. We are old patrons of it ourselves; but we have so often witnessed its abuse, that we have grieved over its misapplication. We desire to see it honourably enlisted in the cause of practice of physic; but we do earnestly hope that, in the hands of adventurers, it may not be made an ostentatious means of fostering and furthering quackery. We are suspicious that the evil of it, already set a-foot by the venturesome, is likely to spread, because of the temptation that it offers to the inexperienced to give it countenance; but we must trust to the more enlightened of the profession to chastise the folly, whenever they find it threatening either the honour of our calling, or the integrity of the principles upon whose careful cultivation we can alone rest with the hope of advancing the science of legitimate physic. Especially, however, do we urge, that the absurdities of the new chemical system—those absurdities which threaten our pathology—may be arrested while they are yet young. Chemistry, as applied to the practice of physic, is a most useful adjunct, both of diagnosis and therapeutics, in the hands of men sufficiently well skilled to be competent to form upon it a rational opinion. In the hands of inexperienced men—to whom we fear its serious truths are becoming too often committed—we do not hesitate to say that they are worse than worthless. Let this be corrected in time! *Malum nascens facile opprimetur; inveteratum fit robustius.*

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Meeting of April 14, 1846.

Dr. Chambers, F.R.S., K.C.H., President, in the Chair.

Some Remarks on Wounded Arteries, Secondary Hemorrhage, and False Aneurisms; by Robert Liston, F.R.S., Vice-President of the Society, &c.

The author states that the subject of wounds of arteries, with the consequences of such wounds, immediate and remote, has possessed, and always must possess, great interest in the eyes of the surgical practitioner. His impression, until very lately, was that no subject had been better handled or was better understood by surgeons generally, and that all writers were pretty well agreed as to the rules which ought to guide the practice in such cases. When, however, we hear of an operation being performed upon a large vessel on account of a recent false aneurism, after careful consideration of all the circumstances of the case by six surgeons, and when there is reason to believe that, at least, an equal number of respectable practitioners (not, however, engaged in the case) were ready to declare the practice pursued very wrong, and contrary to the established principles of surgery, and thus, had

the vessel not been tied, the patient might now have been alive, it is surely desirable that an opportunity should be afforded of discussing this subject, and, if possible, settling the question in dispute. The author then proceeded to relate very shortly the leading facts of the case, and to support the line of practice pursued by reference to, and relation of, some similar instances.

Mr. S., aged twenty-eight, an exceedingly corpulent person, who had, it appears, lived excessively freely for a series of years, was wounded on the 20th of May, 1845, by a pistol-bullet. It entered the upper and outer part of the right thigh, and passed out in the middle of the fold of the left groin; thus traversing the course of the femoral vessels. The flow of blood, more especially from the wound on the right side, was described to have been most impetuous and profuse. It was thrown in jets to a considerable distance. The patient was found by Mr. Jenkins, of Gosport, in an almost lifeless state, and he was with great difficulty recovered from the syncope and depression. A considerable swelling soon supervened over the lower part of the abdominal parietes from extravasation of blood.

May 27th, the seventh day from the receipt of the injury, the swelling in the right groin began to increase in size, and distinct pulsation was then, for the first time, perceived in it. The tumour went on increasing gradually, and it had gained much more in bulk on the tenth day, when Mr. L. first saw him, than it had done on any of the preceding ones. It was of an oval form, and elastic, but firm, as if it was partly made up of coagulum and liquid blood; but it could not be at all diminished in bulk by uniform and continued pressure. Pulsation was strong and distinct in all its parts. The opening on the right hip was filled with a dry depressed slough; the wound in the left groin, a jagged slit, was closed by a very thin cicatrix. The patient's countenance was blanched and waxy, and his pulse quick and feeble. He had, in short, all the appearance of a person who had lost a great quantity of blood.

The nature of the case was very apparent A large false aneurism, not well bounded, rapidly increasing, and arising from a wound of the femoral artery, or some branch divided close to its origin, had to be arrested, otherwise the patient must be left exposed to the risk of perishing suddenly, and at no distant period. After consultations, on the evening of the 30th and morning of the 31st, the external iliac artery was tied, with the loss of not more than a tablespoonful of blood, and with the immediate effect of arresting the pulsation, and removing, in a great measure, the tension of the tumour. Symptoms of peritonitis supervened the same evening, and on the following afternoon the patient sunk.

The author subjoined an account of the post-mortem examination by Dr. Allen, of Haslar. The course of the bullet was traced from the outside through a dense layer of fat, about two inches in thickness. It had divided one of the superficial branches of the femoral artery, about half an inch below Poupart's ligament, and about an inch from the main body of the femoral artery, which had caused a false aneurism. The sac contained about three ounces of blood. No other artery appeared to have been wounded. A considerable quantity of sero purulent fluid was found in the abdominal cavity, and patches of acute inflammation were observed on the intestines. The peritoneum adjoining the wound of the operation was inflamed. It had not been injured by the knife. The ligature had been properly applied to the external iliac artery. The abdominal viscera were healthy, but loaded to an extraordinary degree with fat. There was some enlargement of the right limb, but apparently no mortification. The femoral artery was pervious. The blood in the aneurismal sac was firmly coagulated, and there was no mark of recent oozing from the injured artery. The ball had passed immediately over and along the course of the artery for about half an inch before dividing it. The artery, although not actually detached, would not have borne a ligature.

That a vessel of this class, the author remarked, should have bled so furiously, in the first instance, could not have been anticipated. Having done so, one can so far understand the active pulsation and rapid extension of the tumour. It was, of course, quite impossible to determine whence the blood flowed into the aneurismal cavity. The principal vessel going to the limb might have been wounded, or some considerable branch. A small branch, divided close to the principal vessel, poured out blood furiously, as much so as if an opening in the coats of the artery itself were made by a portion being punched out, corresponding in size to the area of the branch. The division of a small branch at a distance from the source from which it springs is of little importance. It contracts, and soon ceases to bleed; but when it is divided close to the trunk, blood issues from it, as it would if an opening, equal in size to the calibre of the little branch, were made in the trunk itself.

The author noticed the risk of secondary hemorrhage in these cases, in order to show that some active measures were required to arrest the threatened danger. He objected to the operation of opening the sac, and securing the wounded vessel by ligature; that patients who have lost a great quantity of blood are often sunken and lost by the sudden effusion of even a small quantity, and, after adducing some cases in point, he remarked that the danger must be much enhanced when the tumour is so placed that there is no possibility whatever of making pressure on the trunk of the artery on the proximal side of the opening into it, or of the origin of a branch wounded close to where it is given off, as in the case of Mr. S. The cyst could not have been opened without great loss of blood, and it was not likely that a ligature on the branch would have permanently arrested the bleeding; indeed, it was stated by Dr. Allen that the trunk would not have held a ligature.

The author having asked whether there is anything to bear a surgeon out in adopting this practice, adduced a number of cases to show that vessels bleeding outwardly, or pouring their contents into the tissues of a limb or region, have become permanently closed in consequence of the flow of blood being intercepted and weakened for a time by the application of a ligature upon the principal arterial trunk. He referred particularly to a case to be found in the works of a well-known army-surgeon. A man, thirty years of age, was wounded by a musket-ball, which entered the left groin, and passed through the inside of the thigh. On "the tenth day from the injury, the slough from the anterior wound came away, and was followed by so frightful a hemorrhage as to leave no doubt whence it proceeded, nor, from the wound being so high up, any alternative as to the means to be adopted for stopping it" The external iliac was tied, but the patient died of fever. No account is given of any dissection of the parts. "In this case the necessity of the operation is evident, and, as far it went, also its success. Not a drop of blood was lost after it." So says Mr. Guthrie, who, it is to be presumed, conducted the treatment of the patient. We are left to conjecture what vessel was wounded. It may have been a branch, as likely as the trunk, and those who have attended to the description of the hemorrhage in the case of Mr. S., to its impetuosity and amount—will bear the author out in this assertion.

The author observed that he has endeavoured to show: 1st, that the case of Mr. S. was one of great and immediate danger; 2nd, that some decisive step was required to be taken, and that without a day's delay; 3rd, that very great risk would have been incurred in attempting to put a ligature on the wounded vessel; 4th, that there was ample authority for adopting the step which was had recourse to in this case. The dangers likely to arise from the operation were considered as weighing but lightly in the scale against those impending from the effects of the pistol-shot. Inflammation of the peritoneum was scarcely taken into account in consulting on this case Out of the forty-five cases of this operation, collected by Mr. Crisp, nine or one-fifth died, but not one from peritoneal inflammation.

In conclusion, the author remarked that, in the opinion of those concerned, the step most likely to avert danger, and prolong the patient's life, was adopted—the only step, it has been shown, that could have possibly been resorted to with propriety or safety. Upon a candid review of the case, and with a knowledge of all the circumstances connected with it, it now remained for the fellows of the Society to say if there was left anything undone, or anything done imprudently or unscientifically, as has, it appears, been alleged. It is competent also to consider what might have been alleged against the resources of our art had the patient suddenly perished from hemorrhage; if, in fact, we, who had all the responsibilities of this important case to sustain, had stood idly by, waiting for some miracle of nature to save the patient from the inevitable results of his wound, and the author of it from the consequences of his crime.

Mr. Edwin Lee remarked, that several of the cases which Mr. Liston had adduced did not seem to him to bear upon the point under consideration, viz., the advantage or disadvantage of tying the external iliac in cases of wounds of that vessel, and more especially of either of its branches, inasmuch as in ligature of the femoral, brachial, ulnar, tibial, &c, there are abundant means in the collateral and anastomosing branches for the supply of the distal portion of the extremity with blood; whereas the iliac is under peculiar circumstances where tied, giving off no branches above the ligature, and those from the internal iliac (gluteal and ischiatic) being distributed to the muscles of the hip and back of the thigh, there would not be sufficient means, after the ligature of the trunk (considering that the whole of the lower extremity is implicated) for the supply of the limb with blood, and that, consequently (setting aside the dangers of peritoneal inflammation, &c., as immediate consequences of the operation), mortification must ensue—as it appears it did in the two or three cases cited by Mr. Liston, where the iliac had been tied for wounds or sloughing in the groin. The case is widely different when this vessel is tied on account of long-standing disease—aneurism—from that of a wound when the person was a few days before in robust health, as the tumour must gradually obstruct the circulation through the principal trunk, thus affording abundant time for the dilatation of other vessels sufficiently after the application of the ligature, &c., to supply a limb which has long been in a quiescent state with blood, and he believed it would be found, that these are the only cases in which recovery has taken place after this operation.

Mr. Bainbridge observed, that the case, as detailed by Mr. Liston, furnished in itself a complete condemnation of the treatment. It proved the diagnosis to have been incorrect, and the treatment equally so; he (Mr. Liston) had acted in the belief that a large and important artery was the seat of the injury, and performed a painful and dangerous operation for the cure of an aneurism formed by a trumpery little artery, which might have been readily cured by the application of compression. He (Mr. Bainbridge) then narrated a case which he considered to bear directly on the treatment of such an aneurism by the use of pressure. It occurred last August to a man who was accidentally wounded in the wrist by a clasp-knife, by which the tendons and radial artery were divided. Considerable hemorrhage ensued, which Mr. Bainbridge arrested at the time by the application of the tourniquet over the brachial artery, while he got ligatures ready. On loosening the tourniquet afterwards, preparatory to applying a ligature to the wounded vessel, he found that the hemorrhage had ceased, and consequently judged that the artery had retracted, and that there was not any further need of ligaturing it. He therefore closed the wound with adhesive plaster, and applied a compress and bandage. Hemorrhage recurred in a few hours, but was arrested by pressure on the artery above the wound. It soon recurred, and was again stopped; it then ceased for a week, bursting out afresh when the wound was dressed. A fortnight afterwards there was found a false aneurism of the size of a large walnut, situated at the root of the thumb, and extending between the metacarpal bones of the thumb and forefinger. The aneurism was accompanied by considerable œdema of the thumb, hand, and fore-arm. Mr. Bainbridge applied a cork, padded with lint, over the aneurism, and secured it in situ with plaster and bandages; and he also applied compression to the artery above the seat of disease. A bandage was also placed loosely round the limb, so to enable the patient by drawing it tight to command the hemorrhage, should

it recur, which it did a few days afterwards from the aneurism itself. Several days after the recurrence of the last hemorrhage, the aneurism on examination was found to be much increased in size. Compression was then applied by means of a graduated cone, made of pieces of cork wrapped up in lint, the apex of which pressed directly upon the aneurism, and together with this the other precautions were used the same as before, to wit, pressure on the artery above, and the application of an additional bandage loosely round the arm, intended to command hemorrhage if required. This apparatus was kept applied for a fortnight, portions only being loosened when complained of, and after the lapse of that time, when the part was examined, there was a deep indentation in lieu of the aneurism, and all pulsation had ceased. The bandage, &c., were continued for some time longer, after which the man was enabled to return to his occupation. Mr. Bainbridge inferred, from the success he had met with in the treatment of this case by compression, that a similar plan would have been effectual in the case which Mr. Liston had brought forward, and he blamed Mr. Liston for not having had recourse to it. The requisite pressure he thought might have been obtained from a common spring truss, applied on the groin, by which the small artery, whence the hemorrhage proceeded, would have been compressed as it passed upwards over Poupart's ligament, and the femoral artery also, as it lay upon the pubis. Mr. Bainbridge then, in allusion to the exceeding severity of injuries from which recoveries are sometimes made, referred to the preparations in the Hunterian Museum, illustrative of Sir Wm. Blizard's case, in which the shaft of a gig was driven through a man's chest, and yet recovery took place, and the man survived the injury many years. He thought the comparison between such an injury and that inflicted on Mr. S. was very slight, and he (Mr. Bainbridge) concluded by saying that, in his opinion, Mr. Liston had not shown the caution and correct judgment which might have been anticipated, considering the high position he held in the profession.

Mr. Liston remarked that he was not in any way cast down by the observations which Mr. Bainbridge had made. The case of Mr. S. had been the subject of very severe animadversion, but he had acted at the time under very good advice, and, after due consideration, had brought the full details of the case before the Society. It was quite impossible to say beforehand what vessel had been divided. It bled very freely at the time the injury was received, and afterwards the hemorrhage continued internally, a large tumour, pulsating violently, being formed, which was likely to burst at every moment. The danger threatening the patient was not imaginary. In bringing the case before the Society, he wished to state that he had written to several gentlemen, who, he understood, had criticised his practice in this case very freely, but for some reason or other they had declined attending that meeting. He then read an extract from the *Glasgow Medical Journal*, alluding to the details of a case of secondary hemorrhage from sloughing of the groin, in which Dr. Buchanan had successfully ligatured the external iliac artery, and to which the following remarks were appended by that surgeon :—"It may be said of these operations that more of them were required by the strict rules of surgery, which enjoins, in cases of arterial hemorrhage, that we should cut down to the place from which the blood is observed to issue, and there secure proximal and distal portions of the injured tube. All most true, and I most gladly subscribe to this aphorism, along with your regular system compilers of surgical treatises, manuals, and compendiums; but, alas! in actual practice, how many exceptions are we compelled to make! What would such mechanical men of principles have said had death taken place (as undoubtedly it would) in attempting to secure a sloughing, soft, and diseased arterial tube? Why, that I ought to have first tried what a ligature thrown round the iliac artery could accomplish, and if a clot did not form, *as in all probability it would*, then recourse might be had to the *dernier ressort*—the ligature of the distal side of the hemorrhagic spot; also, true it is, however, you must lay your account when you advance in practice to meet with animadversion, and *criticism, do which you will.*" He (Mr. Liston) could not understand the gist of Mr. Lee's remarks. They did not appear to him to have any direct bearing on the case. As to the case narrated by Mr. Bainbridge, it seemed to him to have been mismanaged from beginning to end.

Mr. Bainbridge thought that Mr. Liston had committed an error in judgment in not knowing what artery had been wounded, and he added that, as his patient recovered, and Mr. Liston's died, there was presumptive evidence that he had managed the better of the two.

Mr. Edwin Lee explained that his objection to the performance of the operation which Mr. Liston had adopted, was based on the fact that the collateral circulation would not be sufficient to maintain the life of the limb, and that consequently there would be great danger the occurrence of mortification.

Mr. Liston agreed with Mr. Lee, that when the external iliac artery was tied under such circumstances, there would be the probability that mortification of the lower extremity might take place; but he thought the surgeon was not to be prevented by the anticipation of such a result, from applying a ligature to that vessel if it were required. He had seen over and over again that such a result did not always attend the application of a ligature to the external iliac artery. There is, however, the risk of that consequence, and the lower part of the limb had been more than once amputated in consequence. He wished to add that if a case similar in all respects to that of the late Mr. S., were to occur again in his practice, he should feel himself fully justified in adopting the same operative proceeding.

Mr. Hilton observed that as the legal inquiry into the circumstances of this case had not been concluded by the trial of the principal, and as that person's life was at stake, he thought it would be better that the discussion on which they were entering should be postponed. He made this proposition without any intention of offering offence to Mr. Liston.

Mr. Arnott, in seconding this proposal, observed that, although he considered the principle a sound one, that a wounded artery should be secured at the seat of injury, yet in this instance he believed that Mr. Liston had fully made out his case. Mr. Liston was not called in until ten days after the patient was shot in the groin, by which time an aneurism had formed, and there was not any situation above the wound at which the artery could be compressed. Mr. Liston had not opened the entire question abstractedly, but had confined himself to the details of this special case, in which there had been a large quantity of blood lost, and the patient was pallid and exhausted, and he (Mr. Arnott) thought that Mr. Liston had adopted the only operation which was admissible under the circumstances.

Mr. Dalrymple, in respect to the observations made by Mr. Hilton, stated that the surgical part of the question had been fully decided by the learned judge at the late trial, and that, consequently, the character of the discussion that evening could not have any bearing on any future trial. He thought that the remarks which fell from the judge on the occasion to which he alluded, afforded a sufficient justification to a man labouring under great prejudice and misrepresentation, for bringing the case forward at that society. He (Mr. Dalrymple) thought that the case narrated by Mr. Bainbridge had not any bearing on that described by Mr. Liston. The injury which Mr. Bainbridge's patient suffered was one that was well known, and he could not understand why Mr. Bainbridge had not applied a ligature at once to the artery, when he was aware that it had been divided, and had retracted; and must have anticipated the occurrence of secondary hemorrhage. There was no analogy, he thought, between the application of a pad in this case, and the treatment of a large aneurism in the groin which was on the point of bursting.

Mr. R. Quain remarked that if the discussion then pending could have any influence on the future trial, it had better be stopped at once. Mr. Liston, however, had admitted that his patient died from the immediate effects of the operation, and that was the utmost any counsel could urge.[1] He thought, therefore, that Mr. Hilton's fears were groundless. With respect to this case, the first question that arose, was as to the necessity for any operation, and in considering that question, he would bear in mind that Dr. Mortimer and other gentlemen, of whose assistance Mr. Liston had availed himself, were men of great experience, and he consequently was fully of opinion that an operation was requisite. Then came the next question, was the operation that was performed the right one? He agreed with Mr. Arnott that it was the proper operation, and he alluded to Dr. Warren's case recently read before the Society, in which the axillary artery had been wounded, and the subclavian successfully tied to arrest secondary hemorrhage. Mr. Bainbridge had alluded to the small size of the artery that had been wounded; this, he (Mr. Quain) thought could not be determined beforehand. Mr. Liston, however, had gone beyond this; he had shown that a small vessel, when divided close to a large artery, may give rise to very dangerous hemorrhage, and in confirmation of this statement, he (Mr. R. Quain) mentioned that Mr. Stanley, in operating for hernia, at St. Bartholomew's Hospital, divided a small branch of the epigastric artery, and the patient died from the resulting hemorrhage.

Mr. Curling had very carefully read the particulars of the case as detailed by Mr. Liston, and he could not see any grounds for doubting the correctness of Mr. Liston's proceedings. He could not see the force of Mr. Quain's statement respecting the danger of severe hemorrhage. When a small vessel was wounded near a main trunk, he (Mr. Curling) thought there was sufficient contractile property in the coats of the vessel to diminish the aperture thus produced. Mr. Liston's case presented an anomaly in the very distinct pulsation which existed in the aneurism, and which did not admit of a clear explanation, on account of the small size of the wounded artery.[2]

Mr. Bainbridge stated that he should defer to the opinions of the gentlemen who had addressed the meeting, but he thought they had mistaken his position in the argument. He could not consider it any excuse for Mr. Liston, that the other surgeons in attendance on Mr. S. concurred in his proceedings, for if he had not recommended the operation, it would not have been done, and it is perfectly possible for six or seven physicians or surgeons to be in consultation on a case, and all take an erroneous view of its nature, and consequently advise a plan of treatment not suited to meet its exigencies.

SURGICAL SOCIETY OF DUBLIN.

[From our own Correspondent]

Meeting of the 4th of April.

R. Carmichael, Esq., in the chair.

A communication was read by the secretary, Dr. Benson, from Mr. V. W. Russell, of Limerick, on the efficacy of prussic acid in the treatment of convulsions in children.

The Secretary, and afterwards the President, in commenting upon Mr. Russell's cases, remarked that the details were insufficient to admit of an accurate judgment being formed respecting the value of the remedy, more particularly as a very small dose of the prussic acid had been given—the sixteenth of a drop; and as it had been administered in conjunction with calomel, it might be doubted whether the latter had not acted much the more important part.

On Diseases of Bursæ.

Professor Hargrave placed upon the table two casts, one of them representing a tumour of considerable size and long standing, which Dr. H. had removed from a man aged forty, admitted to the

[1] Mr. R. Quain's statement on this point is erroneous. The mere fact that the operation was the immediate cause of the death, could not in any way serve the prisoner. It must further be proved that the operation was unnecessary, or, if an operation were requisite, then that the one actually performed was not the right one.—*Rep.*

[2] The marked pulsation of the aneurism in this case was in all probability communicated by the femoral artery, which was in proximity with the aneurism.—*Rep.*

City of Dublin Hospital four weeks ago. The man had tumours on both knees, which had been gradually developed during a period of 12 or 14 years, his various occupations having obliged him to rest much on his knees. Though attended with occasional paroxysms of pain, he paid little attention to them, being anxious to work as long as possible for the support of his family; they both felt on examination excessively solid and firm, that of the right knee having on its surface a mammary pointed prominence, which had all the characters of a small circumscribed abscess, so much so, that Dr. Hargrave was strongly inclined at first to puncture it, and get rid of the supposed purulent contents previous to practising excision of the whole mass. The immense mass of foreign growth now exhibited lay in front of the patella, between it and its bursa, and was invested by a dense fibrous capsule, containing within it alternate layers of blood and fibrine, the mass being perfectly circumscribed—a point connected with its pathology which he considered very interesting. At the site of the original patellar bursa there was found a yellowish coloured fluid, not purulent, however, and immediately posterior to which, as already observed, lay the solid mass. The soft parts, at the seat of the operation, are now uniting by suppuration and granulation. The tumour of the left knee is partly ulcerated, discharging a thin sanguineous matter, while the remainder of the mass is in an exceedingly indurated condition. In other respects the man is perfectly healthy, but was unwilling to submit to the simultaneous removal of both tumours, though Dr. Hargrave was himself anxious to do so.

A discussion of great length, but of little practical interest, succeeded, in which the efficacy of the several operations of partial excision of the sac, puncture, subcutaneous section, &c., was warmly advocated by the different members present.

It was observed by Mr. Gordon, that at a late meeting of the Pathological Society, Mr. Adams had related some cases in which the removal of a portion of the sac had been attended with complete success; and that Mr. Adams preferred this mode of treatment to that of complete extirpation of the sac—a proceeding which he considers may often be attended with danger to the joint, besides that few would submit to the operation of extirpation. It was in a late number of Guy's Hospital Reports, Mr. Gordon believed, that the operation practised by Mr. Adams was proposed by Mr. Aston Key.

Professor Williams went considerably into the details of the subject, and remarked that the therapeutic indications as to treatment must at all times become subservient to the particular circumstances characteristic of the individual case. Among the many modes of treatment long known and published was that just ascribed to Mr. Aston Key; he had himself, some sessions since, brought under the notice of the Society some cases treated by an application of the subcutaneous section—an operation which, he believed, it was generally agreed on, was one of the simplest and safest. But this and the operations of simple incision, seton, &c., were applicable only to cases in which thickening or hypertrophy of the sac had not proceeded to any great extent. But in the case under discussion (Dr. Hargrave's) there was not mere thickening of the sac, but an almost solid tumour, a mass of adventitious growth situated behind the patellar bursa in which the fluid was originally contained. Complete extirpation of the mass then, he contends, was the obvious course to pursue in such a a case.

Mr. Thorpe begged to add a remark to what had been stated by Mr. Gordon respecting Mr. Adams' cases, namely, their having been dressed from the bottom with lint, thereby exciting suppuration in the sac. In reference to the question of partial or complete excision of the sac, Mr. Adams had stated his objections to the latter mode of proceeding to consist in a dread of opening the joint while detaching the sac from its connections with the ligamentum patellæ, extensor tendons, &c.

Dr. Williams felt that it was entirely out of the question to allude, in Mr. Adams' absence, to any opinions that might have been expressed by that gentleman; but as to the abstract fact of the danger of opening the articulation, he could not for his own part admit it; he could, in proof of the perfect safety of the operation, bring forward the concurrent testimony of two cases so treated at the City of Dublin Hospital by himself. The leading point in performing the operation was, he showed, to cut down on the edge of the patella. The presence of the concrete bodies sometimes met with does not, Dr. Williams states, interfere with adhesions when the opposed surfaces are brought into contact after the operation of puncture or subcutaneous incision.

Dr. Geoghegan exhibited a preparation of diseased bursa, removed by him some time ago from a middle-aged man, occupied as stoker to a steam-engine. The tumour, about the size of a walnut, having rather a solid and somewhat irregular feel, indicative of thickening of the sac, Dr. Geoghegan deemed excision the most suitable procedure. From the inner surface of the sac, a number of finger-like bodies projected, some of them half an inch in length, of a greyish-white colour, elastic, and of cartilaginous consistence, the free extremities being rounded; numerous small circular plates of a similar texture were also observed, some attached by a portion of their circumference, others going loose in the cavity of the bursa.

The present case appeared to Dr. Geoghegan to indicate that those loose bodies, although evidently detached from the interior of the sac, are not always formed in the manner described by Sir B. Brodie, viz., by effusion of lymph on the lining membrane; but, in some instances, rather by distinct growths which, from their length or the narrowness of attachment, become liable to separation by the action of external mechanical influences.

At the conclusion of the discussion, the frequent occurrence of dangerous symptoms, consequent upon even the simplest operations in these cases, was dwelt upon, and some cases alluded to in which, after the failure of various counter-irritants, the external application of nit. argent. was attended with success.

GOSSIP OF THE WEEK.

Apothecaries' Hall.—The following gentlemen were admitted licentiates on the 9th of April, 1846.—Osmond Mullett, William Lord Grundy, Henry James Wordsworth Welch, Edward Bennion Batten, Thomas James, John Yeoman, Octavius Edward Peddle Chard, Bryan Lister, John Barrett Collyns, and William Haines.—16th April, 1846: George Peskett, Henry Peskett, Philip Beal, William Smith, Allan Cleland, George Henry King, Charles Mathias, William James Kite, and William Bowden.

Royal College of Surgeons in England.—The following gentlemen were admitted Fellows of this College, on the 16th inst., viz.—John Nottingham, Liverpool; Caleb Burrell Rose, Swaffham, Norfolk; George David Pollock, Sackville-street; Henry Burford Norman, Duchess-street, Portland-place; Hugh Bell, Yarmouth. The following gentlemen were admitted members on the 17th inst.— J. R. Reece, A. Halley, J. Brady, F. F. Allen, A. McMahon, E. L. West, D. L. Morgan, F. G. Broxholm, A. G. Fenwick, W. C. Tucker, C. Broughton, and W. Delpratt.

Appointments.—Dr. Bence Jones has just been appointed physician to St. George's Hospital. Dr. J. Snow is appointed Lecturer on Medical Jurisprudence in the Aldersgate-street School of Medicine.

Births and Deaths in the Metropolis.—From the weekly report of the Registrar General ending April 18th, it appears that the number of births registered in that time, amounted to 710 males, and 702 females—total 1412. The number of deaths registered in the week amounted to, males 516—females 451, total 967; showing a weekly average derived from deaths during 1841-2-3-4 and 5, and corrected for increase of population to the middle of 1846, of

	IN FIVE SPRINGS.	FIVE YEARS.
Males	456	493
Females........	436	475
Total—	892	968

The deaths registered in this the third week of the second quarter, and in each of the corresponding weeks of the same quarter of the six preceding years were as follows, viz.: in (1840) 888, (1841) 906, (1842) 809, (1843) 961, (1844) 846, (1845) 928, and in (1846) 967, being an average in the series of weeks, exclusive of the last, of 889.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity.—The annual dinner of this society took place last Saturday, the 18th instant, at the Freemason's Tavern, and was attended by about sixty of the members and their friends. Sir Charles M. Clarke Bart, the chairman, in proposing the health of the vice-patrons, paid a hearty tribute of respect to the memory of Dr. Denman, one of the founders, if not *the* founder of the Society, and the father of the present Lord Chief Justice Denman, whose election as a vice-patron had recently taken place. The proceedings of the evening (the dinner inclusive) went off with great spirit, and several donations were announced.

Appointments. — Assistant-surgeons: F. W. Blake (additional), to the Caledonia, for service of Plymouth Hospital; W. R. E. Smart, to the Trafalgar; A. Emslie, to Melville Hospital; A Brown, to the William and Mary; A. Jackson (additional), to the Victory; C. Roberts, to the Pique; Francis M'Aree (acting), of the Vindictive, to the Hyacinth; Alfred Jackson (acting), from the Victory, to Haslar Hospital; A. Lillie, to the Griffon. 8th Foot: Assistant-surgeon Henry Clinton Martin, from the 87th Foot, to be assistant-surgeon, vice Johnstone, who exchanges. 39th Foot: Assistant-surgeon Charles Frederick Stephenson, M.D., from the 50th Foot, to be assistant surgeon, vice Stowart, who exchanges. 50th Foot: Assistant-surgeon Ludovick Charles Stewart, from the 39th Foot, to be assistant-surgeon, vice Stephenson, who exchanges. 87th Foot: assistant-surgeon William Smellie Johnstone, M D., from the 8th Foot, to be assistant-surgeon vice Martin, who exchanges.

Haslar Hospital.—Sir William Burnett, M.D., F R.S. and Director General of the Medical Department of the Navy, has just left town on a visit of inspection to this Institution.

The Queen's College Birmingham.—The Reverend Dr. Warneford has presented through William Sands Cox Esq., the munificent sum of £1000 towards the erection of additional rooms for the students, halls of study, lecture-room and chemical laboratory.

By an order in Council, Joseph Henry Green, Esq. of St. Thomas' Hospital, and a member of the Council of the Royal College of Surgeons, has just been appointed one of the Commissioners for the government of the Pentonville prison, in the vacancy occasioned by the resignation of his Grace the Duke of Richmond.

MORTALITY TABLE,

For the week ending April 11, 1846.

Causes of Death	Total.	Average of 5 summers	Average of 5 years
All Causes . . .	967	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	155	162	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	84	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	161	155	157
Diseases of the Lungs, and of the other Organs of Respiration	318	271	294
Diseases of the Heart and Blood-vessels . . .	30	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	93	65	72
Diseases of the Kidneys, &c.	12	7	7
Childbirth, Diseases of the Uterus, &c.	11	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	11	7	7
Diseases of the Skin, Cellular Tissues, &c.	4	1	2
Old Age	55	60	67
Violence, Privation, Cold, and Intemperance .	30	25	

THE MEDICAL TIMES.

No. 344. **SUMMARY.** MAY 2.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of the 20th April, 1846; M. MATHIEU in the Chair.

A new compound of iodine, mercury, and chlorine, recommended in the treatment of scrofula by Dr. Rochard, has proved, according to his assertion, successful in five cases which have lately come under his notice, and in which the external use of the medicine was continued for the space of eleven months. The cases consisted chiefly in white swellings, fistulous ulcers, and enlargement of lymphatic glands. The new compound is called by Mr. Boutigny, iodhydrargyrite de chlorure mercureuse.

ACADEMY OF MEDICINE.

Meeting of April 21st, 1846; Dr. ROCHE in the Chair.

AMPUTATION AT THE ANCLE; BY DR. MALGAIGNE.—A letter was read from Dr. Malgaigne communicating the result of his researches on an interesting point of operative surgery. In diseases of the foot requiring amputation, it not unfrequently occurs that the astragalus remains healthy, and its preservation may be desirable on account of the greater length which will be left to the extremity. No rules have hitherto been laid down for the operation in the calceo-astragalean joint, and M. Malgaigne has endeavoured to supply the deficiency. We will add that no surgeon is better calculated to do so than the talented author of the "Manuel de Médecine Opératoire." Dr. Malgaigne describes at length the various details of the operation, the two difficulties of which were, in the first place, the formation of a proper flap, and, in the second, the ready separation of two bones so closely connected as the astragalus and os calcis. The flap is taken from the internal part of the foot, a semi-circular incision dividing first the tendo Achillis, the skin below the external malleolus, and the dorsal aspect of the foot. The two extremities of this first division are united by the branches of a rounded V, the angle of which descends so low as the middle of the plantar aspect of the foot. A flap is thus obtained of sufficient dimensions to cover the stump, and endowed with a satisfactory degree of vitality. The disarticulation is performed in the following manner:—The articulation of the scaphoid and astragalus being freely laid open, and the tendons cut across, the blade is presented horizontally (the cutting edge towards the joint), to the small anterior articulation of the os calcis, between the surfaces of which it is easily insinuated. The section of the first fibres of the interosseous ligament causes at once a separation of the bones, and the operation is achieved without difficulty.

TREATMENT OF OBLITERATION OF THE PUPIL (ATRESIA IRIDIS), BY THE RESTORATION OF THE NATURAL APERTURE OF THE MEMBRANE; BY DR. ROBERT.—The restoration of the natural pupil was first instituted by Woodhouse, and Dr. Robert is of opinion that the operation does not deserve the oblivion into which it has been allowed to fall. When it is practicable the eye is generally found in the following condition:—The aperture of the pupil is extremely contracted, being sometimes almost effaced, and indicated only by a greyish depression on the anterior aspect of the iris; false membranes, varying in colour from an opaline hue to a dead white occupy its place, and present sometimes a degree of consistency, which may be compared to that of fibrous or even fibro-cartilaginous structures. The circumference of these false membranes—this is an important remark—may be detached *without laceration* from the edge of the pupil, particularly from its inner half. The capsule of the crystalline lens in many cases remains transparent—a fact of which no absolute certainty can be obtained before operation, except when vision is to a certain extent preserved. The capsule may adhere to the false membranes. The tissue of the iris is also found to have undergone more or less alteration, being generally thinned near its aperture by the long continuance of disease. Woodhouse operated with a cataract needle introduced into the eye through the tunica sclerotica, and carried behind the iris towards the pupil, where it was made to lacerate the obliterating false membranes. When, on the contrary, the iris adhered to the cornea, the instrument was carried through the latter membrane. In order to appreciate properly the various modes of operation, Dr. Robert considers atresia according as it has resulted from cataract or not. 1. In the first supposition, when a cataract has previously existed, and has been couched or extracted, the surgeon has not to think of the cristalline lens, and may at will introduce his instruments through the sclerotica or cornea. 2. When the lens is known to be placed behind the false membranes, which obstruct the pupil, Dr. Robert lays down the precept to avoid injuring it—an accident which is inevitable in Woodhouse's operation. Dr. Robert proceeds in the following manner:—The cornea is divided by a narrow puncture, as far as possible from its centre, and in its external part, except when that precise spot is the seat of adhesions with the iris; through the incision a minute forceps, or a small hook, are introduced, in order to seize and detach the false membranes. Two patients have already been successfully operated on by this method; in one case both eyes were blind; and both patients have recovered their sight.

M. Piorry then read a report on a paper treating of palpitations of the heart. The author of the paper referred palpitation in *all* cases to the presence of carditis—a theory inadmissible in the present state of science. The conclusions taken by the learned reporter were unfavourable.

Professor Piorry read a second report on a case of wound of the spleen made with the trocar during the operation of paracentesis abdominis. The case was one of ascites, brought on by a long continuance of ague in a child, aged twelve years. Paracentesis was performed by a pupil, and percussion not having been previously had recourse to, the instrument penetrated eighteen lines into the spleen. Hemorrhage supervened, which fortunately was not fatal, and a long time after death was the result of a disease of the intestines. The intestinal duct was found to be covered with tubercular productions, and a large quantity of blood filled its cavity. Professor Piorry thought this was a favourable opportunity to state that, in his practice, he had often seen ascites the result of the enlargement of the spleen from intermittent fever, absorbed by the exhibition of the sulphate of quinine, and to insist upon the indispensable necessity of ascertaining, before the performance of paracentesis, and by plessimetric percussion, the exact spot of the abdomen in which the viscera or the accumulation of fluid is to be met with, in order to avoid the former, whilst withdrawing the latter. The conclusions proposed by the learned reporter, favourable to the memorialist, were adopted unanimously by the Academy.

Professor Piorry read a third report on a case of "Intermittent Ileus," by Dr. Bouillon-Lagrange. The case was that of a robust countrywoman, aged forty, the mother of five children, who was suddenly seized with violent pain in the right side of the abdomen, nausea, and afterwards incessant vomiting. A tumour of the size of an orange, sensitive on pressure, could be readily distinguished by manual exploration. These symptoms lasted during fifteen hours; subsided, and were, during the next ten days, reproduced regularly every forty-eight hours. Sulphate of quinine, in combination with opium, was exhibited with perfect success. This case, which Dr. Bouillon-Lagrange considers, with reason, to be of extremely rare occurrence, he denominates "intermittent ileus." The word ileus, Professor Piorry conceives to be one of those comprehensive, but unintelligible, designations which should be banished from the medical vocabulary. Prof. Piorry observed two cases in which ileus was said to exist: the first was a case of obstinate vomiting, combined with abdominal pain, Death showed gangrenous spots in the small intestine. This supposed ileus was perhaps a case of poisoning. The other case had more analogy with Dr. Bouillon-Lagrange's observations; plessimetric percussion demonstrated the presence of air in the abdominal tumours; which Professor Piorry attributed to a temporary obliteration of the intestine by spasmodic contraction, and accumulation of gaseous products above the obstruction. M. Piorry concluded by remarking that such accidents were far from uncommon in hysterical patients, and that bark had much more power against them than preparations of opium. The report was adopted.

The meeting adjourned at five o'clock.

HOSPITAL NECKER.

CLINICAL LECTURE. *Diagnosis of Meningitis*: By PROFESSOR TROUSSEAU.

In one of the cases of meningitis towards which we have lately directed your attention, you observed, Gentlemen, that although the child lived twelve days without taking a single particle of food, it

did not grow thin. This is a very remarkable peculiarity of acute cerebral affection of infants. You are aware of the extreme rapidity with which an infant loses flesh in acute pulmonary and abdominal diseases; and the exception to be made in this respect in favour of brain-fever becomes, therefore, in doubtful cases, a useful element of diagnosis. Some days since, I was called upon to visit a child, aged five years, who was suffering from sickness and vomiting. The pulse was quick; the skin hot; the eyes bright; and the outward appearance much agitated. The little patient had, besides, a slight cough, but no stethoscopic sign indicated thoracic disease. All these symptoms might have, therefore, induced us to admit the presence of meningitis, had not the malady lasted three days, during which the child had certainly lost flesh; founding our negative diagnosis on this symptom, we asserted that brain-fever or meningitis did not exist, and the next morning we succeeded in finding in the lung the physical signs of pneumonia. There is something truly remarkable, Gentleman, in this fact of the preservation of embonpoint in meningitis. We do not well see how it can be reconciled with a pulse maintaining itself at 200, for eight or ten days, and with the total absence of food. It is only one proof more of the rupture of the connecting link of the various functions in acute meningitis.

Chronic Hydrocephalus.—You have seen in the wards, a large flabby infant, aged five months, presenting the outward appearances of health, and affected to a considerable extent with chronic hydrocephalus. The effusion of serum in the ventricular cavities is evidently very abundant; the skin of the head is dragged, and displaced by distension to that degree that the brows are carried much above the orbit, whilst the eyeball is concealed in a great measure under the inferior eyelid. We are about trying active treatment in this case, and will, therefore, make some few remarks on the pathology of this generally fatal disease.

What is chronic hydrocephalus?—it is probably a modification of the nutrition of the ventricles of the brain, by which their secreting powers are increased, inflammation having, according to all probability, little or nothing to do with the production of the complaint. We have observed lately a case which would lead us to divide the subject into external and internal hydrocephalus. A child was brought to hospital with an immense accumulation of serum under the pericranium, the bones being perfectly solid and well united. Other cases of a similar nature have been recorded, and they present at first sight some analogy of appearance with internal hydrocephalus, from which they must be carefully distinguished. The origin of these external cysts it is not very difficult to trace; for the most part they are due to fresh irritation having set in, in the cysts of cephalhæmatoma, a fact observed frequently in the hematic cysts of the breast and ovary. Internal hydrocephalus appears to be only the exaggeration of a natural secretion; but almost all the cases die of apoplectic or epileptic accidents—of meningitis, and sometimes of rupture of the basis of the cranium from extreme distension. It is very important to distinguish hydrocephalus from macrocephalia (Heaven forgive us the word), or exaggerated development of the brain. You will observe in ricketty children the head to be very large, and the intellect well developed; the degree of intelligence does not permit us to believe that in such cases the increased size is due to the presence of water, and post-mortem examination has in no instance of the kind shown any cephalic alteration. We conceive that the development of the brain beyond its usual size is here due to the softened condition of the bones, observable in those of the skull, as well as in the limbs. The diagnosis between what I am compelled, notwithstanding my distaste for new words, to call macrocephalia, and hydrocephalus, rests chiefly upon two points—the age of the child, and the state of the osseous system. Hydrocephalus is a disease of the very first infancy, and is seldom if ever observed to begin after the fifth or sixth month of life; the limbs are straight, and the child healthy; in exaggerated development of the brain, on the contrary, the malady never is observed before the second year, because that is also the period at which rickets are found to begin; a coincidence amply demonstrated by inspection of the limbs. The prognosis of hydrocephalus is always a sad one; and the treatment proposed against it, although extremely varied, has been constantly unsuccessful. Calomel in small doses, blisters to the head, tincture of iodine externally, purgatives, diuretics, all the various instruments of therapeutics, have been tried in their turn, and all have proved equally unavailable. Puncture of the membranes has been frequently essayed; in some cases it has been repeated two, three, and four times, without any other result than that of prolonging life for some few months. Compression also has been recommended, but requires much prudence in its application; in proof of this assertion I will only record one instance:—I was consulted some time since for a case of chronic hydrocephalus, and compression was the plan I advocated. Straps of adhesive plaster were fixed round the head, and we were rejoiced to find, after one month, that the head had not increased in size. Some days later, the child lost through his nose an immense quantity of serum, and died suddenly. The bones at the base of the skull had been disarticulated by the water, which had met with an unyielding resistance in the strips of plaster. This fact has rendered us very circumspect in the employment of compression in such cases, and we use it only with great caution. In the patient at present in the wards, we will combine its use with the cap-plaster (*emplâtre à la calotte*), from the resolutive properties of which we may obtain some benefit. This plaster is composed of white and black pitch, vinegar, and flour. No salts of copper are contained in the plaster used in hospital. We conceive that these local applications will be assisted in their action by the exhibition of a strong infusion of digitalis, and of one-tenth of a grain of calomel, daily.

LA CHARITE.

CLINICAL LECTURE.—*Diagnosis of Chronic Articular Disease*; By PROFESSOR VELPEAU.

You have observed in the wards three patients affected with diseases of the knee-joint, which it is not uninteresting to put side by side, in order to demonstrate the practical importance of a precise diagnosis. One of these patients is a man lying at No. 38. His sufferings began in the groin, whence they extended to the knee. The diseased joint is deformed, and increased in size one-third; no fluid is effused in the joint, it is evidently an affection of the synovial and bony structures. The next patient is a woman, whose knee has been enlarged two years; once already, under the influence of hospital treatment, she was almost cured, when a fall occasioned a relapse. The diseased knee is twice the size of the healthy one; about four ounces of fluid are contained in the joint, which cannot be moved without pain. The third case is that of a woman, who suffered some years since of swelling of the joint, and who had been quite free from morbid symptoms down to the last ten days; on the forearm of this patient are scars indicating ancient disease of the bones. The knee is increased in size, and one week was sufficient for the development of the malady without any considerable amount of pain. We find here the external appearances analogous to those of the last stage of white swellings, and a relaxation of the fibrous structures which does not exist in the other two cases, and which is generally met with only after long continued articular disease. The woman is very dull, and possibly the knee has suffered for a longer time than she acknowledges.

A great division of arthropathic affections is that which refers to their anatomical seat in the hard or soft parts. This division is not only warranted by a considerable difference in the prognosis and treatment of both orders of diseases, but also by well-marked diagnostic signs. Thus, when the malady has begun in the hard structures, pain has been the first symptom experienced, and swelling has occurred only much later, the progress is slow, and an internal cause, more or less easy of detection, always governs it; the groin is deep-seated, and presents intervals of exacerbation and of diminution; the swelling, occupying at first only a very limited space of the joint, causes gradual deformation of its shape; all these characters exist in the first case we described to you, of the man lying at No. 38. Articular disease, seated in the soft structures, may be occasioned by external or internal causes. In this form of white swelling we again find signs which can readily permit us to detect the nature and seat of the malady. Thus, the cause itself may indicate disease of the bones or disease of the soft parts: scrofula and syphilis pointing to the former, rheumatism, on the contrary, to the latter. Besides, the swelling is the first symptom observed, and affords strong presumption, when it is followed by, and has not succeeded pain, that the injury has originated in the soft textures. The disease, however, being one of long duration, it not unfrequently happens that it is impossible to obtain from the patient any very certain account of the first stages of the malady, and his want of memory may cause to the surgeon some degree of uncertainty. In most instances, however, it is possible to establish the diagnosis; thus, in our second patient the articular swelling was preceded by a fall; the tumefaction is considerable, and formed in a few hours; no fracture, no dislocation is present—how can we doubt that here the soft parts alone are concerned? The third case is one of a more complicated nature. The patient assumes that the swelling preceded the pain, but we have stated our reasons for receiving his assertions with some degree of doubt. The liquid contained in the joint must be either pus or synovia; because the collection of matter has formed gradually, we are inclined to admit the purulent nature of the fluid—a circumstance which adds to the gravity of the case.

DAN. M'CARTHY, D.M.P.

Italy.

CRETINISM.—M. Garbiglietti, in the *Giornale delle Scienze Mediche della Societa Medico-Chirurgica di Torino*, considers the absence of light as one of the principal causes of cretinism. He remarks that cretinism prevails in deep vallies and narrow gorges, and many of the vallies are so situated as to receive the direct rays of the sun during a few hours only in each day, and its light sometimes reaches them only by reflection. Many places in the mountains, with a northern aspect, are, in winter time, four, five, and six months together without the benefit of the sun's light. The form, texture, aspect, and blackish colour of the schistous rocks are also less available than the calcareous rocks in reflecting the luminous rays.

POLYDIPSIA.—M. Novellis, in the *Giornale delle Scienze Mediche della Societa Medico-Chirurgica di Torino*, describes a case of polydipsia, in which the patient, a male, drank daily the enormous quantity of 480 Piedmont ounces of fluid, and ate in proportion. The quantity of urine passed was always less than that of the fluid imbibed. There was not any evidence of inflammatory action in any of the organs, nor were there any signs of diabetes. The man appeared, on the contrary, to be in very good health. M. Novellis commenced the treatment of the case by placing his patient on animal diet. At that time he ate daily from six to seven pounds of either bread, meat, or eggs, and drank from forty-one to forty-three pints of water, mixed with wine or vinegar. He passed during the same time from twenty-seven to thirty pints of urine. There not occurring any change from this plan, it was next attempted to induce salivation by causing the patient to chew certain roots, and to keep a small stone constantly in his mouth. This plan also proving ineffectual, he was then subjected to vegetable diet, after fourteen days of which, his daily rations consisted of six pounds of bread, spinach, and potatoes, and seventeen pints of wine, water, and vinegar. Urine passed, fifteen pints. After the lapse of another fortnight, his daily diet was six pounds of solid food, and thirteen and a-half pints of drink; urine, eleven pints. The patient appeared to be in much better spirits, and was free from his intolerable thirst. The treatment was then suspended for a week in consequence of an attack of diarrhœa. It was afterwards resumed, the man being allowed a little animal food, and mineral lemonade. Two drops of creosote in eight ounces of barley water were also given, by the advice of M. Cornelianì. The quantity of drink taken was thus reduced to

six or eight pints in the course of four and twenty hours, and the patient continuing in that state for several weeks, he was discharged cured, according to the report of M. Novellis, of the polydipsia.

PELLAGRA IN ITALY.—M. Balardini, in an article published in the *Annali Universali di Medicina*, appears to attribute the occurrence of this disease to the constant use of maize or Indian corn, as an article of diet. He considers that this disease broke out in Italy either concurrently with, or very soon after, the introduction and general use of maize as food. Pellagra, he says, occurs exclusively in the provinces of upper Italy, where Indian corn forms the principal, and, in some instances, the only article of diet used. It does not occur in one province of Southern Italy, the Valtedine, where the other hygiênic causes to which the disease has been attributed, are known to prevail—viz., poverty, atmospheric variations, irrigations, &c.; in that province maize is used with moderation. The disease spares persons in moderate circumstances—inhabitants of towns—who make use of other articles of food, as well as the maize. Abstinence from the exclusive use of Indian corn diet is sufficient to cure pellagra in those persons in whom the organic tissues are not too deeply diseased. The principal and most frequent cause of pellagra is a diseased state of the grain, caused by imperfect maturity. It generally occurs in wet and cold seasons, at which time more cases of pellagra are observed, and the cases already in existence are aggravated. The disease in the grain, consisting in the presence of a fungous parasite, modifies its physical and chemical properties, render it acrid, and apt to produce a special form of disease in the human organism. Two distinct effects, equally injurious, result from this altered condition of the grain. In the first its edible portion is rendered less adapted for nutrition and the reparation of the strength of the frame, so that men and animals fed exclusively on it, become emaciated, and perish slowly. In the second place, the grain thus degenerated, contains besides certain acrid, inassimilable principles, which are absolutely deleterious, and capable of exerting an injurious action on the economy. When thus spoiled, the grain falls in price, and is principally consumed by the very poor—that is to say, the labourers. M. Balardini does not recommend the entire abandonment of maize as an article of diet. In itself, and eaten moderately, it is no way dangerous; but he says it should not be used exclusively, and not at all when in a diseased state. In conclusion, to demonstrate the extent of the ravages of this fearful plague, he states that in the year 1830, in the provinces of Milan, Mantua, Brescia, Bergamo, Como, Pavia, Cremona, Lodi, and Soudrio, out of a population of 1,446,702 souls, there were 20,202 cases of pellagra.

SORE NIPPLES.—M. Rossi, in the *Annali Universali de Medicina*, refers the occurrence of fissures and ulceration of the nipples of newly delivered women, to the presence of inflammation or ulceration, and not unfrequently aphthæ in the mucous membrane of the mouth of the infant, and, as prophylactic of the fissured nipples, he recommends the exhibition of mild purgatives to the infant, and the frequent washing its mouth with barley water and mel-rosæ, or a little vinegar, each time before it takes the breast especially. The nipple also, he says, should be anointed on each occasion with the oil of sweet almonds, or with fresh butter, and washed, after suckling, with barley, acidulated, or bran water. These precautions should never be omitted, as, by a single neglect, the fissured state of the nipple may be induced.

VACCINATION.—M. Calosi, in the *Bulletina della Scienze Mediche*, states that in no one case out of 402 children vaccinated since 1839 at the hospital for orphans, at Bigalis, has small-pox, or any of the diseases consecutive to vaccination, appeared. His statement is the more valuable, as the children being always under his care, its correctness may be fully relied on.

FRICTIONS WITH LARD AS A FEBRIFUGE.—M. Brunetta, in the *Memoriale della Medicina Contemporanea*, details twelve cases in which he employed general frictions all over the body with lard in cases of intermittents, with the effect of curing the disease. It is not impossible that the extensive friction thus practised may have been itself exceedingly influential in arresting the disease.

EPILEPSY CURED BY THE TREPHINE.—In *Il Filiatre Sebezio*, M. Spinelli describes the case of a youth, fifteen years of age, subject to epilepsy from a month after birth, and which was referred to a slight contusion on the right parietal bone received during labour. The patient's head was exceedingly small, and M. Spinelli is of opinion that the brain being compressed by the narrowness of the cranium was the cause of the attacks. In January, 1844, the youth had the occipital bone fractured by a blow, for the relief of which the trephine was applied, and the depressed portions of bone raised. The case was under treatment rather more than a month. The fractured portion of bone was permanently elevated by the brain, in spite of the measures adopted to prevent it, but no inconvenience resulted to the patient, who, at the date of the report, March, 1845, had not had any more epileptic fits.

TŒNIA EXPELLED BY CICUTA.—M. Maulucci narrates, in *Il Filiatre Sebezio*, two cases in which the expulsion of tœnia was obtained by means of the internal use of cicuta, after the pomegranate and other anthelmintics had previously failed. In the first case the remedy was used accidentally, and induced symptoms of its toxic agency.

England.

THE PURGING CROTON.—Under this title Mr. Morton has published a paper in the *Veterinary Record*, on the seeds and oil of croton tiglium, and their action on horses and cattle. He remarks that an objection has been raised by veterinary surgeons to the use of croton from its irritating and inflaming the mucous surfaces over which it may pass or come into contact. This is seen when the expedient is had recourse to of giving the bruised seeds, or the farinaceous residuum after their expression, in the animal's provender, or by dropping the oil on the tongue. Yet on this its operation as a purgative principle depends. When externally applied, some of the preparations of croton prove powerful irritants. A terebinthinate solution of the acrid principle, made by macerating an ounce of the bruised seeds in eight ounces of the oil of turpentine for a fortnight, has been found to be so active as to cause much rubefaction, followed by a vesicular eruption, and even desquamation of the cuticle of the thick skin of the ox tribe. Occasionally this solution requires dilution with olive oil, which is always required for the horse; but for him there are better counter-irritants. The acrid principle is also extracted by alcohol. The form of tincture made by digesting an ounce of the bruised seeds in sixteen ounces of rectified spirit has therefore been recommended. This, on the addition of water, becomes cloudy. The advantage derivable from this pharmaceutical compound is, that in cases of emergency a purgative can be exhibited in the water the animal uses. But, as a purgative to the horse and cattle, the farinaceous matter that remains after croton oil has been expressed from the seeds is by far most generally made use of, it having being found less irritating than the oil, or the seeds themselves; its activity, however, must vary with the amount of acrid principle that remains in combination. The union of this with other cathartic agents renders them more active, while the quantity of each required to be given is lessened. From Mr. Morton's experiments, the cotyledons of the seeds appear to contain the purgative principle. He decorticated sixty grains of croton seeds, carefully separating the testæ and plumulæ, and administered the remaining cotyledons in equal proportions to two aged horses. On the following morning both the horses were labouring under superpurgation, accompanied with much constitutional excitement. The alvine evacuations were profuse, frequent, and watery; the visible mucous membranes highly injected, the extremities and surface of the body cold, the pulse and respiration accelerated, and the prostration of strength extreme. Astringents combined with sedatives were immediately had recourse to, and hot fomentations applied to the abdomen, but all in vain: one of the animals died about mid-day, and the other lingered in great agony till the evening. Inspection of the alimentary canal after death showed the whole of its lining mucous membrane to have been in a state of acute inflammation, the blood-vessels highly turgid, and the large intestines filled with fluid fæces. The cæcum and colon were more particularly involved. The separated plumulæ and testæ were afterwards exhibited to a horse without any visible action on the bowels. The paper is concluded with the details of two cases, in which the exhibition of croton caused death. In the first the croton farina, (quantity unknown) was given in combination with aloes. In an hour's time, the horse purged violently for about twenty minutes: the perspiration rolled off him; the pulse was upwards of 80 beats in the minute, and full; the respiration hurried; the visible mucous membranes highly injected, great restlessness was evinced, the extremities were cold, and the countenance indicated much suffering. Blood-letting was had recourse to, and opium freely administered by the mouth, as well as in the form of enema; hot fomentations were applied to the legs, and heated rugs placed around the body. No abatement of the symptoms appeared to take place, further than a cessation of the alvine evacuations (none having occurred since an hour and a half after the ball was given), but rather an increase in their urgency: the pulse became 100, the restless ness was much greater, and the countenance more anxious. These symptoms continued for a few hours, when the pulse became imperceptible, the body cold and clammy, rigors succeeded, and shortly afterwards death occurred. At the autopsy there was found a slight engorgement in the lungs, but nothing further: not a trace of inflammation could be detected on the peritoneal covering of the intestines, nor on the mucous lining of either the intestines or the stomach, and their contents were in a perfectly healthy state. The other viscera of this cavity were also healthy. In the other instance thirty drops of croton oil were placed on the bit, the animal being very unruly, and it being impossible to exhibit the medicine in any other way. It died in twelve hours, having previously presented symptoms somewhat resembling those noticed in the first case. The owner would not allow the body to be examined after death. Neither of these cases occurred under Mr. Morton's care.

ENLARGED TONSILS IN A BULL.—Mr. Litt describes, in the *Veterinary Record*, the case of a four year old Hereford bull, which had some discharge of a sanious character from the nose, cough, denoting irritation of the larynx, an occasional gasping for breath, and a roaring noise during respiration. There were no appearances of constitutional disturbance; the evacuations were natural; the pulse in no degree disturbed; and the appetite as good as usual. Mr. Litt diagnosed some mechanical obstruction to respiration, the nature of which he could not define. The disease continued to make progress for about two months, when a tumour made its appearance immediately behind the angle of the lower jaw on the left side, apparently deep seated, and very hard to the touch; it rapidly increased in size, until it became as large as a child's head. The disease continued to extend, and ultimately so far involved the pharynx, that deglutition became difficult, and the appetite was lost. The animal was at last destroyed, and on examination there was found situated just above the velum palati a tumour of considerable size, extending in its passage forwards into the chambers of the nose, and thus obstructing respiration, whilst, by its pressure inferiorly on the pharyngeal sac, the passage of aliment must have been rendered extremely difficult. On cutting into it for inspection, the structure of this enormous growth presented no appearance of a malignant character. It seemed to consist simply of an immense enlargement of the tonsil glands, according to the opinion of Mr. Simonds, who looked upon it as most probably the result of catarrh, or subacute inflammation of the tonsils.

(The following are the only articles of interest in the recent number of the *Medical Gazette*.)

EMPYEMA CONSECUTIVE TO PLEURITIS—PARACENTESIS THORACIS.—Dr. Grayling describes the case of a bargeman, fifty-one years of age, who, after the extreme violence of an attack of pleurisy on the left side had been subdued by venesection, leeching, and mercury pushed to ptyalism, presented

symptoms of empyema, for the relief of which paracentesis thoracis was performed, and thirty-six ounces of pus withdrawn. Relief followed the operation, which was repeated in a few days, when only a small quantity of aqueous fluid escaped. After the first operation, tonics and good diet were administered. The second operation was succeeded by increased dulness of the affected side, with hectic and night-sweats; expectoration of a thick, viscid, greenish, muco-purulent fluid, streaked with blood, took place to a large extent, and continued for some time, but gradually diminished in quantity. At the date of the report the patient was entirely free from cough, and had grown quite stout and strong.

STRANGULATED FEMORAL HERNIA.—Mr. Phillips records the case of an old lady, seventy-three years of age, and in infirm general health, who became the subject of femoral hernia. About a year before he saw her, the hernia had become strangulated, and the requisite operation was performed by Sir B. C. Brodie, the recovery being slow, and for some time doubtful. Owing to the low tone of life extensive sloughing took place, but ultimately the recovery was complete, and the patient was able to wear a truss, by which, however, the perfect reduction of the rupture was not maintained. A short time before Mr. Phillips saw her, she being then under Mr. Propert's care, the bowels became obstinately constipated, resisting the action of her ordinary aperients, followed by general tenderness and tympanitis of the abdomen, with vomiting. The symptoms increasing, Mr. Phillips was called in, and on examining the rupture, found that it was apparently easily reduced, leading, therefore, to the belief that the obstruction existed at some point beyond the protrusion. The next day there not being any improvement, but, on the contrary, the hernia being then irreducible, Sir B. C. Brodie was added to the consultation, prior to which the long tube of the stomach pump was apparently passed into the bowel to the extent of twelve or fourteen inches, but the injection returned by the side of the pipe. Another instrument was soon afterwards used in consequence of some imperfection in the other, and the new tube could not be passed into the bowel beyond four or five inches. Sir B. C. Brodie was decidedly against any operation; he did not consider that the intestine was strangulated, the opening having been made so large by operation. He thought, however, that there was obstruction somewhere. The patient died in the course of the night, and the next day the body was examined. The abdominal cavity was laid open by a central longitudinal incision; from this another was carried in an oblique direction so as to lay open the intestine contained in the sac. Although the opening through which the intestine passed was large, it was still small enough to cause a strangulation of the gut, which was of a dark chocolate colour. From that point the intestine was followed until the left lumbar region was reached without the discovery of any obstruction. Mr. Phillips then observed that the tube had passed far beyond that point, and that it was not probable that there was any obstruction further down; however, the search was continued, and it was then discovered that the uterus and the rectum were consolidated into a dense fibrous mass, a small cavity existing in each; that of the rectum being barely sufficient to admit a small bougie. Several curious circumstances are presented in this very interesting case. The almost simultaneous occurrence of a strangulated hernia, and of intestinal obstruction from another cause; as also the ready passage of an elastic gum stomach tube through an obstruction which did not admit of the passage of any fæcal matter, even when acted upon by enemata. The probability is very strong that the intestine would not be strangulated a second time at a point which had been so much enlarged by previous operation; the probability became almost a certainty when the tumour was so readily returned; and yet, although little more than twenty-four hours elapsed, between the gurgling reduction of the gut, and the death of the patient—the powers of life being naturally feeble, yet the intestine had acquired a dark chocolate colour, and had become strangulated at the sidecrural ring. Then with respect to the other obstruction the obscurity is not less:—It existed at a time when the gut very readily passed back through a large opening; it was fair to assume that the obstruction was not there, unless indeed the gut had been nipped or unduly pressed upon by the truss, and had thus undergone contraction; but then the distended transverse colon rendered that view of the case improbable, and made the assumption probable that the obstruction was nearer the rectum than the part contained in the hernial sac; but opposed to that assumption was the fact that twelve inches of stomach pump tube were passed along the intestine with comparative ease; and supposing the rectum disease to be one on which the original obstruction depended, how came it that if it admitted a tube of the size of the little finger, it would not allow fluid fæcal matter to pass? For it is the fact that there was no impaction of solid fæcal matter at any portion of the intestinal tube. Two suggestions here occur; the hernial tumour was very inefficiently maintained by the truss; it was so constantly down that it might have constituted an obstacle, or it might be that the very flexible tube first introduced did not pass through the rectal obstruction at all, but became coiled up in the very extensible rectum of an old woman with very relaxed fibre; for the more unyieling new tube could not be passed beyond four inches. Whatever explanation may be adopted, Mr. Phillips thinks it must be admitted, that whether the rectal disease constituted the original obstruction or not, it is certain that at a later period another was constituted by the strangulated intestine.

LIGATURE OF ARTERIES—Mr. T. Wilkinson King concludes that when an artery has been ligatured, the only essential and real efficient in the closure of the vessel is a thin capsule of cellular membrane—a growth whose arrangement is determined as the vessel retracts, and whose substance, mass, and texture, depend on the state of the natural fluids. This cord formed external to the thread which surrounds the artery, expanding over and sheathing the cones together with continuous attachments, may in fact be traced in part to the walls of an abscess contracting and being stretched. A like cord may form in stumps, if the attachment or adhesion of the tied extremity of the vessel suffice to give, with the arterial diastole, any considerable tensive actions. Considering the cord of the ductus arteriosus which rather grows, and the umbilical arteries which waste much more decidedly, considering such late sequelæ of ligature on an iliac artery as more or less conic arteries, and a cord ten or thirty lines in length, and considering the cord half an inch long, between two healthy and most abruptly contracted arterial ends six weeks after ligature of the femoral, Mr. King thinks there is ample proof that tension is a material and determining element of the process in question beyond what by some will be readily granted. Time and varied illustration, direct experiment or collateral evidence, may yet correct the notions which appear most settled on the subject in hand, and he even anticipates some revolution in the principles now in force relative to ligatures. The healing changes that occur within the tube at the part tied, hardly occupy more space than a mathematical point, for when this point becomes expanded to any extent it is a proof of the deficiency of the so-called internal repair; and the simple fact that the point in question is, for the most part, the only one to which a clot adheres, shows that it alone is altered, if not deficient in organisation. It is a much more positive truism than many seem to suppose, that no agglutination of the living surfaces of the tube can occur where blood intervenes, whether fluid or clot. Again, there is more truth than is very prominent in the assertion, that the part to be healed is but a very small point, and that fortified in a very peculiar manner. The tube is reduced to a cone, and the diastolic pressure within its apex is very inconsiderable, while the sides of the cone have less than their ordinary pressure, more than their usual thickness, and greater support from without by reason of the traction of the ligature. For a given number of days, also, more or less of the contracted vessel is left comparatively undisturbed, to attain a fixed balance between its new circumstances of tension and its consequent modified state of nutrition. All this, of course, is irrespective of adhesion. Still the closure of a great artery by ligature is, indeed, a wonderful process. A little section sloughs, the next surface on each side is absorbed, and the next seems to contract and heal. The last, whether a long or a short portion of the cylinder, becomes conical, or at least rounded. The coagulation of blood is often either questionable or most insignificant. The cord is, in part, a measure of the retraction or separation of the divided ends of the tube. The ultimate contraction of granulation, &c., is a part of the healing process; and when an inch of the tube has sloughed away between ligatures, and the puckering up of a long abscess leaves nothing but a ligamentous cord from one wide empty arterial bulb to another, it is not a little indicative of the importance of external contractions. Occasionally the ligature finally leaves the divided artery with only a solid circular layer of ligament between the two portions of tubes. The retraction of artery in such a case is extremely small, the repair is solid, and after the discharge of knot, a very short cylinder remains, which is concave at both ends, about equal in diameter to the vessel, and formed of threads whose direction is determined by the extensions which operate on each of them. It is by reasons of its shortness and free nutrition that this cylinder does not become narrow towards its middle. It is usually attended by some inflammatory thickening and contraction of the adjacent tube.

Scotland.

EXCISION OF THE HEAD OF THE HUMERUS.—In the *Edinburgh Medical and Surgical Journal*, Dr. Stratton details a case of a severe gun-shot wound of the left arm, by which two inches of the upper part of the humerus were destroyed, and the soft parts much injured. The patient was an Indian boy, six years of age. Dr. Stratton excised the head of the bone, and the boy recovered with an useful limb, after a long convalescence, during which several pieces of bone came away. From the intense heat at the time the accident happened, the wound a day or two after the operation was filled with maggots, which were destroyed by the chloride of lime lotion, and others were not produced.

PULMONARY APOPLEXY.—Dr. Paterson gives at great length in the *Edinburgh Medical and Surgical Journal*, the details of a rare and interesting case of pulmonary apoplexy, proving fatal by rupture of the periphery of the lung, and effusion of blood into the cavity of the pleura. He prefaces the account of his case by a notice of six other cases of the same form of disease which occurred in the practice of other medical men. His patient was a married woman, thirty-seven years of age, the mother of four children, of quiet disposition, temperate and regular habits, and previously always extremely healthy. It appeared that five nights before Dr. Paterson was called in, she had been beaten and kicked violently by her husband, and had from that time complained of severe pain in the right side. When first seen by Dr. Paterson, there was great collapse. The attack came on with violent pain in the right side, so severe as to wake her from sleep. Upon examining the bruised part, no swelling nor discoloration was visible, nor could any fracture be discovered. It was, however, very painful on pressure or the touch. Percussion and auscultation told well for the state of the chest. The heart's action was feeble, and there was a slight cough. The evidence of depression continued throughout the day. The next day there was not any dulness in any part of the chest, but the breathing was rapid, and accompanied with sibilous and mucous rattles; the pulse imperceptible at the wrist, rapid and feeble in the carotids. Two days after, there was a decided dulness in the right side, which continued to increase, until the whole of that side of the chest from below upwards became quite dull. The respiration could be gradually traced leaving the lung as the dulness ascended, until it entirely disappeared from that side. The heart pulsated fully two inches to the left of its proper place. The difficulty of breathing then amounting to absolute orthopnea, paracentesis thoracis was performed, and sixteen ounces of a bloody looking fluid drawn off. No improvement

followed the operation, and the patient died eighteen hours after, eleven days after the sudden seizure, and seventeen from the infliction of the injuries. Just before death, the face was pale, and the lips and nails of a blue colour. The fluid drawn from the chest separated on standing for twelve hours into serum and coagulum, the serum bloody, and the clot dark and soft. There were eleven ounces of serum, and five of coagulum. The body was examined forty-six hours after death. Upon laying open the chest, six imperial pints of bloody fluid were found in the right pleura; it contained no loose coagula, but was thicker at the posterior than at the depending point of the chest. The angle between the diaphragm and costal pleura rising up to the fifth rib was filled by a large black coagulum, and covered over internally with shreds of adventitious membrane. The whole pleura of this side was coated over with this adventitious structure, being thicker and redder, and studded over with bloody papillary elevations, particularly over the ribs anteriorly. No fracture or injury of any of the ribs was discovered. The lung of this side was found diminished to less than a third of its natural bulk, and occupied the superior and posterior part of the pleural sac. It was completely covered over with a layer or layers of adventitious membrane, flocculent on the surface, and stained, like all the rest that was found, of a reddish colour. The texture of the lung was condensed and contained no air; portions of it sank in water. the bronchial tubes were found filled with mucopurulent matter. In the lower lobe of this lung, and to all appearance corresponding to the seat of injury, a tumour of the size of a pigeon's egg was discovered. It occupied the substance of the lower edge of the lung, being covered by pleura and adventitious membrane; upon separating the inflammatory covering from the pleura investing the tumour, it presented an irregularly mamellated form; at one of these raised points, at the outer side of the lung, and very close to the apex, an irregular aperture, sufficient to admit a crowquill, and filled with a coagulum of blood, was discovered. This aperture led to the centre of the tumour, which contained also a firm dark-coloured coagulum. A probe could easily be passed through the aperture to the depth of half an inch or so into this clot. A section of this tumour presented the usual appearance of a mass of pulmonary apoplexy, in the centre of the dark-coloured coagulum, and several smaller around it, which seemed to have caused the mamellated appearance externally; the texture of the rest of the tumour was homogeneous, and of a reddish colour. The left lung was healthy; the bronchial tubes contained a small quantity of purulent looking mucus. The heart was of the usual size, and presented no abnormal appearance. The pericardium, as well as the left pleural sac, contained a small quantity of clear serosity. The abdominal organs were healthy. This interesting case having become the subject of judicial inquiry, the professional opinion given was to the effect that a sufficient connection could not be established between the injuries inflicted by the husband, and the cause of death to tend to his conviction. *** This Scottish opinion if, "not proven," may perhaps have been the most proper under the circumstances, but there can hardly be a moral doubt that the brutal conduct of the husband induced the pulmonary disease which ultimately destroyed his unfortunate wife.

Ireland.

Retroversion of the Uterus.—Dr. Mitchell records, in the *Dublin Hospital Gazette*, the particulars of a case of retroversion of the uterus, caused by a kick inflicted on the patient when between the third and fourth month of utero-gestation. The day after the injury she was unable to pass water; she had a dose of oil, which produced an evacuation from the bowels, and a small quantity of urine was passed. On the fourth day she was admitted into the South Eastern Lying-in Hospital, under Dr. Mitchell's care. On examining the abdomen, the bladder was found much distended, the uterus could not be felt, and the patient stated that after the kick she became quite flat, although previously rather large. On examining per vaginam, it was found that the posterior wall of the vagina was prolapsed through the os externum, dragging the rectum distended with fæces, with it; the os uteri was with difficulty reached, and discovered above the pubis. On passing the finger into the rectum, the fundus uteri was felt low down in the vagina, and on a plane inferior to the os. The woman felt as if a great body was forcing through her, with regular bearing down pains, and complained much of a dragging weight in the loins and groins. On feeling for the meatus urinarius not a trace of it could be discovered, owing to its being drawn so much up, the anterior wall of the vagina being put so much on the stretch by the displaced uterus. Dr. Mitchell tried to depress the cervix uteri, by hooking on the two first fingers of the right hand, so as to take off the pressure from the bladder, in the hope that urine would flow out, but unfortunately it could not be moved, although the middle finger of the left hand was introduced into the rectum at the same time, for the purpose of pushing the fundus upwards; he then introduced the two-bladed speculum vaginæ, and after some difficulty succeeded in passing a small gum elastic male catheter into the bladder, by which means he drew off sixty-five ounces of urine, to the great relief of the patient. An enema was then administered, by which the rectum was emptied of its contents, and the prolapsed vagina consequently much diminished in size. Dr. Mitchell then passed the first two fingers into the rectum, and pushed up the fundus uteri, whilst he drew down the cervix with the first two fingers of the right hand hooked upon it in the vagina. After some time and patience, the fundus uteri ascended, and the os was brought directly into the axis of the cavity of the pelvis, being prevented from passing further backwards by the prolapsed condition of the vagina; the woman was then left quiet in bed; and a sedative administered. In a few days all the symptoms of prolapse disappeared, the uterus reassumed its natural position, and the woman was discharged cured. She has since been delivered of a living child. In commenting on this case, Dr. Mitchell observed that prior to attempting to reduce the uterus, it is necessary to evacuate the rectum and bladder, and it sometimes happens that by this alone a cure is effected naturally. It is not, however, in all cases, an easy matter to pass the catheter; by recollecting, however, that the concavity of the urethra looks backwards instead of forwards, and thus, by passing the instrument with its convex side to the pubis, the surgeon will generally succeed. Although the mere raising up of the cervix uteri, as recommended by Baudelocque, will sometimes succeed in causing the urine to flow out without the use of any instrument whatever, still cases have occurred where it was necessary to puncture the bladder as recommended by Sabatier, when it could not be otherwise evacuated, or where it has been found necessary to puncture the uterus, or the membranes of the ovum, or, still more serious, to divide the symphisis pubis, as advised by Gardien. The symptoms should, however, be very urgent indeed, which would induce any one to resort to operations of so formidable a character, and Dr. Mitchell stated that he agreed with Dr. John Clarke in thinking, that any one accustomed to pass the catheter, will succeed with a small flexible one in every case.

Eccentric Hypertrophy of the Heart.—In the *Dublin Hospital Gazette* Dr. Malcolm describes a case of eccentric hypertrophy of the heart complicated with pericarditis. The heart was of twice the usual size, and both ventricles were dilated; adhesions (which, however, were but slight) were universal between the two layers of the pericardium. A distinct membranous excrescence was observed at the edge of the tricuspid valve, and there was opacity of the aortal semilunars. In addition to the above morbid conditions, the bronchial membrane of both lungs was injected and thickened, and adhesive reddish mucus lined it throughout. The pulmonary tissue was generally congested; and at the apex of the left lung, a dense band of coagulable lymph was stretched between the layers of the pleura. The history of the subject of this case was particularly interesting, and may be very briefly stated as follows:—A young man, aged twenty, previously healthy, was attached; after having accidentally fallen into the dock, with very severe inflammatory symptoms of the chest, especially great dyspnœa and pectoral oppression, for which he was repeatedly treated by large and repeated bleedings, blistering, and the administration of tartar emetic. Under this treatment, he received great relief, and was apparently recovering favourably, when the dyspnœa returned, accompanied with œdema of the ancles. Stethoscopic examination indicated pleuritic effusion and bronchitis; and the very short, rough murmur heard with the first sound of the heart (as it eventually turned out) marked the existence of pericarditis. The pulse was 114, and soft and feeble, and there was great wakefulness. In a few days after this report, he was suddenly attacked with the most urgent orthopnœa, and the most extraordinary palpitation of the heart, the pulse amounting to 185! Under the use of large doses of tartar emetic, his pulse fell in twelve hours to 140, and the dyspnœa became much relieved; subsequently the pulse fluctuated between 140 and 120. His respiration continued always about 40, and bronchial and mucous rales pervaded the whole chest, and masked every other sound. On several occasions the pulse became irregular, and it was ever excessively feeble; perspirations very profuse at times; purulent expectoration appeared several days before death, and faintings occurred on several occasions. During this distressing case, one stethoscopic phenomenon was uniformly remarked, viz., a mucous rale, with dulness on percussion, in the left subclavicular region, which may be explained by reference to the postmortem examination. The duration of this case, from the first pulmonary attack to the fatal termination, was twelve weeks. The great interest attached to it consists in the very long period that the patient continued to linger under such intense pericardial inflammation.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

By G. J. GUTHRIE, F.R.S., &c.

LECTURE II.

Partial division of arteries; Case of partial section of the brachial artery; Case of ditto in the femoral artery; Wound of a deep-seated artery the cause of extravasation of blood in the cellular structure of the limb, forming a non-pulsating tumour in general; Pulsations of some tumours caused by the impulse given to them as a mass by the artery against which they are lying; The whizzing sound or thrill absent in such cases; The extravasated blood, if it remain fluid, causes suppuration, if coagulated, is absorbed; If it increase in quantity, the wounded artery should be cut down upon, and tied. The external wound in these cases the guide for the incisions in cutting down upon the artery; Distinction between a false aneurism from a wound and from disease; Operation for a false aneurism from a wound; Mr. Keate's case; M. Delpech's case; Professor Petrunti's case; The false aneurism should be laid open as soon as its nature is ascertained; Injury of an artery by external violence; Case of aneurism in the lower part of the thigh from a blow; Inflammation and abscess following an injury to an artery; Diffused aneurism from the same cause; Enlargement of the collateral circulation after ligature of an artery. Two distinct kinds of collateral circulation; Mortification of a limb the result of a sudden injury to an artery, the collateral branches not having time to enlarge; The external iliac ought not to be tied for diffused aneurism in the groin from punctured wound of the femoral artery; Will cause mortification of the limb, or peritoneal inflammation, with the formation of matter behind it, on secondary hemorrhage from the unclosed ends of the artery, or suppuration of the sac; Ligature of the subclavian inapplicable for a wound of the axillary artery; The Hunterian theory of the cure of aneurism totally and utterly inapplicable to the treatment of wounded arteries accompanied by an

open wound; A wounded artery should be secured at the part where it is injured; Case of aneurism in the ham, with an increased number of the collateral branches; Case of wound of the femoral artery by a musket ball; Occurrence of mortification, requiring amputation; Condition of the wounded artery; Case of musket-shot wound of the femoral artery; Fatal mortification; Case of musket-shot wound of the femoral artery and vein; Secondary hemorrhage; Ligature of the wounded vessels; Fatal mortification; Wound of the popliteal artery; Mortification, amputation, death; Wound of femoral artery; Occurrence of mortification ending fatally, from the non-performance of amputation; Wound of the femoral artery; Partial mortification; Occurrence of secondary hemorrhage; Ligature of a large branch of the femoral by mistake; Death; Wound of a branch from the profunda; Improper ligature of the femoral, terminating fatally. Cases of mortification from injury of the popliteal ending fatally while waiting for the line of demarcation; Fatal mortification from arteritis; Case of diffused aneurism from injury of the popliteal, threatening gangrene; Treatment by incisions; Case of ligature of the common iliac for supposed gluteal aneurism; Prevention of mortification by frictions on the limb for twenty-four hours; Conclusions.

When an artery is merely cut or torn half through, but not completely divided in the first instance, it is in the same state with regard to hemorrhage, as if it had partially given way by ulceration. It can neither retract nor contract, and will continue to bleed until it destroys the patient unless pressure be accurately applied, and maintained until further assistance can be procured. The practice to be pursued is to divide the vessel if it be a small one, such as the temporal artery, when it will be enabled to retract and contract; and the bleeding will in general permanently cease under pressure, especially when it can be applied against the bone. If the artery is of a larger class, and continues to bleed, it should be sufficiently exposed by enlarging the wound; a ligature should be applied above and below the opening in the vessel, which may or may not be divided between them at the pleasure of the surgeon.

CASE 11.—During the battle of Talavera, in 1809, a man was brought to me who had lost a large quantity of blood from a wound made by a musket ball in the arm, which had bled profusely, and was only arrested by tying a handkerchief tight over the wound. The brachial artery, just below the edge of the pectoral muscle, had been half cut across, and on being exposed again, bled furiously. A ligature was placed on the artery, above and below the wound, and the man perfectly recovered.

CASE 12.—In June, 1829, I happened to be at Windsor, on a visit to my old friend the late Dr. Fergusson, and was called to a young gentleman, the upper part of whose right femoral artery had been accidentally cut by the point of a scythe. On dilating the wound, a tourniquet being on the limb, black blood flowed freely from it; on unscrewing the tourniquet by degrees, arterial blood showed itself, and the upper end of the artery was secured by ligature when the tourniquet was removed. Venous-looking or black blood then again flowed in greater abundance than before, and evidently from a large vessel. This I restrained by pressure made below the wound with the thumb of the left hand, whilst I laid bare the lower part of the artery, from a slit in which near an inch in length, the black blood was seen to flow. A ligature passed around the vessel below the wound, suppressed the bleeding. The artery was not divided, and the young gentleman perfectly recovered, and has continued well until this day. The absolute necessity for two ligatures was here well shown, as well as the flow of dark coloured blood from the lower end of the artery.

When an artery is wounded at some depth from the surface, and the external opening is small, blood not only issues through the opening, but is often forced into the cellular structure of the limb to a considerable distance, the pulsation of the tumour is observable, and the thrill or sound which accompanies a ruptured artery is distinct. If a large quantity partly in a fluid, partly in a coagulated state, is collected immediately over and around the wound in the artery, the tumour may not pulsate or give forth any sound if the coagulated blood is in considerable quantity, although some elevation of the tumour may be observed corresponding to the pulse.

This rising or pulsation of the swelling often depends on the impulse given to the whole as a mass by the artery against which it is lying, and not upon blood circulating through it. An impulse of this kind is distinguishable in a bronchocele, which lies immediately over and in contact with the carotid artery, and was well shown in two cases which came to me from the country for operation, being supposed to be aneurisms. The mere act of deglutition removed the tumors from the artery, and showed they belonged to the trachea, and not to the vessel, and when elevated, the pulsation was nearly indistinct. It is the same when blood is extravasated by the rupture of small vessels, in consequence of the passage of a wheel over the limb, and especially in the thigh, where I have seen a swelling containing fluid blood pulsate in an almost alarming manner, until it gradually diminished as the blood coagulated, when the motion became a mere elevation at each stroke of the heart. The whizzing sound or thrill attendant on a ruptured artery is in these cases wanting, being a very diagnostic mark of this accident, although I am well aware that where there is true aneurism, and it has burst, forming a diffused and spurious one, the thrill may be wanting, but the history of these cases enables a surgeon to distinguish between them. If several ounces of blood are thrown out, and remain fluid, they ought to be evacuated, or suppuration will ensue. If they become coagulated, the mass will be gradually absorbed. Fluid blood should be evacuated by a small opening, and the part afterwards treated by compress and bandage. If the fluid or partly coagulated blood should increase in quantity, and the swelling continue to enlarge and pulsate, the extension of the mischief should be arrested by opening the swelling and securing the artery by ligature.

When the external opening is enlarged, and the clots which filled it up are at all disturbed, arterial blood begins to flow, and the finger will readily follow the track through which it passes down to the artery, if it should not be too far distant. If the incision is made sufficiently large to enable the operator to remove these clots of blood with rapidity, the finger will more readily pass down to the wound in the artery, which, if a large one, may be thus easily discovered, if within reach and sight, provided the tourniquet be thoroughly unscrewed, and the surgeon is not afraid. A ligature should then be placed above and below the opening in the artery. M. J. Z. Amussat, in a memoir read before the Royal Academy of Sciences, of Paris, in February, 1843, has dwelt at length, on and has attached perhaps more importance to this track leading from the external opening to the wound in the artery, than it appears to deserve. The great merit of his work is, however, the acknowledgment which he thinks it a matter of great importance to make, and which he supposes he has deduced from his own observation, "that the surgeon should take the wound for his guide in all these cases of aneurismal swelling, and follow the conducting canal in the tumour itself down to the wound in the artery, which is to be secured by ligature above and below the opening in it, unless the external wound should be too distant from the course of the vessel." This is a fact worthy of remark, being an acknowledgment of the correctness of those opinions, and of that practice I have promulgated by my writings and lectures since the battle of Albuhera, in 1811.

When an artery is wounded, and the external opening in the integuments heals so as to prevent the blood from issuing through it, a traumatic, spurious, circumscribed, or diffused aneurism is said to form, according to the facility which is offered by the structure of the parts for the confinement or diffusion of the extravasated blood. A traumatic aneurismal tumour of this nature differs essentially from aneurism which has taken place as a consequence of disease, and not of direct injury. If a spurious aneurism forms from disease, the artery is in general unsound for some distance above and below the tumour. In the aneurismal tumour from a wound, the artery is perfectly sound, except as far as concerns the seat of injury. There is then not only a great and essential difference between these two kinds of aneurism as regards their nature, but also with respect to the collateral circulation, and the operation to be performed for their cure; and the surgeon may not overlook these facts.

CASE 13.—A school-boy, about fourteen years of age, let a penknife drop from his hand while sitting down, and drew his knees suddenly towards each other to catch the falling knife; the point was thus forced into the inner and middle part of the thigh, and wounded the femoral artery. The medical man on the spot put a plaster on the little incision in the integuments, and the wound quickly healed. The boy complained of uneasiness, but was supposed to be making more of it than necessary, and was made to go into school as usual. The limb however began to swell, and the boy was brought to London, and consulted his family surgeon, who put him to bed, and poulticed and fomented him, expecting an abscess had formed, which I was sent for to open during his illness. I found the limb very much enlarged from the upper part to the knee, and with that peculiar discoloration which convinced me that blood was under the integuments, and I refused to open it where the abscess was supposed to be pointing, until I had everything ready for the operation of securing an artery. There was no pulsation to be felt when I first saw it, and I was assured there had been none. When all was ready I introduced the point of a lancet, and after a clot of blood had been forced out, a jet of arterial blood flew across the room. The hemorrhage was arrested by pressure below Poupart's ligament, whilst I enlarged the opening in the integuments. Two washhand-basins were filled with coagula, and I put my finger on a large opening in the artery, under which two ligatures were passed by means of an eye-probe, and the artery was divided between them. The muscles had been clearly *dissected*, and the cavity extended from the fork internally, and trochanter externally, to the knee. There was much less suppuration than I expected. The ligatures were detached about the usual time, and the patient entirely recovered. This case was given to me by Mr. Keate, and the following it from *Delpech Clin. Chir.*

CASE 14.—M. Maigret was wounded by a small triangular sword in October, 1816, in the lower part of the left thigh; the anterior wound bled profusely, but the bleeding was arrested by compression, and at the end of eight days both the external wounds had healed. On moving about incautiously he felt pain in the part, and perceived a small tumour under the cicatrix in front, about the size of a nut, and which rapidly increased, so that on the fifteenth day the femoral artery in this case, accompanied by *two* veins, was tied above the edge of the sartorius muscle, by an incision begun three inches below Poupart's ligament. The patient perfectly recovered, although it was a long time before the swelling totally disappeared.

CASE 15.—Raffaele Castaldi, aged thirty-seven, was stabbed, July, 1824, on the external and superior part of the left thigh, and lost a considerable quantity of blood. The wound closed, and at the end of eight days a small, but strongly beating tumour was observed opposite to the cicatrix. The treatment of Valsalva was adopted, and ice and astringents were applied to the swelling. These means were continued until December, and ultimately led to the formation of a deep eschar on the face of the tumour. On the cicatrisation of the ulcer left by this, the swelling was found to be diminished, to be hard, and without pulsation. At the end of a year, believing himself cured, he placed a piece of copper over the firm swelling, by way of protection, and returned to his usual laborious exercises. In November, 1834, twelve years afterwards, on lifting a heavy weight, he felt something give way in the old swelling, which immediately became larger, and beating, and in 20 days extended from one inch below Poupart's ligament to the lower fourth of the thigh. Professor Petrunti applied a ligature immediately below Poupart's ligament, which came away on the thirteenth day. On the thirtieth, the wound was nearly healed. On the thirty-first day,

bleeding took place from the wound, which was restrained by compression, but returned on several occasions. A compress and tourniquet were then fitted on above Poupart's ligament, which succeeded in stopping the hemorrhage, but gave rise to a deep gangrenous eschar, which took a long time to cure. Three months after the operation the wound healed, the tumour gradually diminished, and the patient ultimately recovered.—*Gazette Medicale*, 1835, p. 647.

These three cases show each a different mode of treatment. Mr. Keate, called upon to open an abscess, demurred, doubtful whether he had not a diffused aneurism to deal with. M. Delpech knew he had a diffused aneurism before him, but which was not so large as to preclude his placing a ligature above it, yet below the profunda, on which, he says, he reckoned for the support of the limb. He succeeded, and his operation (of Anel) was admissible because there was no external opening communicating with the sac, and that the blood in it was coagulated. If it had remained partly fluid, partly in clots, suppuration would in all probability have taken place, and a renewal of the bleeding might have occurred, requiring another operation. Mr. Keate's was therefore the safest and the best mode of proceeding, even under the most favourable circumstances. In M. Petrunti's case the tumour was not removed, and the artery yielded after an interval of twelve years from the receipt of the injury, probably from becoming diseased. The operation of Anel failed, when that of Hunter on the external iliac would have been done by all English surgeons, and would have succeeded, inasmuch as there is reason to believe that the upper part of the femoral artery was unsound, and that the compression above the pubis, which gave rise to the deep gangrenous eschar, obliterated the canal of the external iliac artery in a similar manner to the operation.

The great error in all these cases consisted in not laying open the tumour on the eighth or tenth day, whilst it was small, or as soon as its nature was ascertained, and placing a ligature on the artery above and below the wound. If a tumour of this kind, being circumscribed in the first instance, should burst, and blood be in consequence poured out into the cellular membrane of the whole limb, it swells enormously, and gangrene is oftentimes only prevented by amputation. This may occur in a case of true aneurism, and is always a very dangerous accident. If taken in time the ordinary operation for aneurism may suffice, if long-deferred, amputation will be a last but not often a successful resource.

An artery may be injured by external violence without being punctured, and without any external wound, the consequence being the obliteration of the canal, mortification of the extremity, or the formation of an aneurism, which may be a true one by dilatation if the internal coats only are affected, or it may, through ulceration, suppuration, and sloughing, be spurious, and circumscribed, or diffused.

CASE 16.—A stout, young, and healthy man was admitted into the Westminster Hospital with an aneurism of the lower part of the thigh, about the size of a small but flattened orange. Some three months before he had received a sharp blow on this part from the edge of a piece of hard leather, which gave him acute pain for a time, and he some days afterwards discovered the beating swelling for which he was sent to me. A ligature, composed of one thread of strong dentist's silk, placed on the femoral artery in the lower part of the upper third of the thigh, came away on the twelfth day, and the man perfectly recovered. There can be little or no doubt of the aneurism having formed after a partial rupture or derangement of the inner coats, and from a dilatation of the outer coat of the artery.

CASE 17.—A young and healthy man, of a vigorous constitution, was discharged from a cavalry regiment, and sent to me with an aneurism of the thigh, where the artery passes through the triceps. Some weeks previously the horse of another soldier had run against him when on horseback, and forced the end of a hard bolster between the affected thigh and the saddle, giving him acute pain at the part, which subsided into an uneasiness for a day or two, some time after which he discovered a small beating swelling, which gradually enlarged, and prevented his riding, and on account of which he was discharged. I admitted him into the Westminster Hospital, placed a ligature on the femoral artery at the usual place, and he perfectly recovered.

When inflammation and abscess follow an injury inflicted on the artery through violence, without an external opening, or if sloughing should take place, the treatment by incision is absolutely necessary, as well as the application of two ligatures to the artery. When a diffused aneurism forms rapidly in a limb after a great injury, but without an external wound, the place in which the artery or arteries is or are injured being unknown, the case is greatly complicated, and requires the most serious consideration, whether the trunk of the artery shall be tied or the limb be amputated. If signs of mortification occur, the limb should be cut off forthwith.

A correct knowledge of the collateral ciculation is of the utmost importance; surgeons understand by it the means whereby blood is sent to the extreme parts of a body, or to a limb, when the usual supply through the principal trunk is cut off. This collateral circulation is more perfect, more active in young persons during the increase or growth of the body, than it is either at maturity, or in the decline of life. The important point is not, however, alone referrible to the time of life in which the continuity and permeability of the main trunk ceases to exist, but to the nature of the disease or injury which has given rise to it.

When an operation has been successfully performed for aneurism, and the patient has died, some time afterwards dissection has shown various arteries enlarged, both above and below the part where the trunk was obliterated by the ligature; and not only an enlargement of arteries, which from their regularity have received names, but others have been developed not usually known to exist, or not of a size to be conveniently traced. These through their frequent anastomoses bring the blood at last into several larger trunks, by which it is again conveyed to the original vessel below all and every obstruction which may have taken place; thus compensating by a circuitous route for the loss of the direct supply. The principal object of inquiry is, do these vessels always exist, or at what period of time do they begin to enlarge, so as to enable them to carry on the circulation, in the manner in which it is presumed to be done?—for few will assert, that the enlargement of these particular collateral vessels was an accidental play of nature, and existed previously to the commencement of the disease or injury for which the operation was performed. On this point, the theory of the operation for aneurism and its applicability to wounded arteries appears to hinge; and what is of more importance, on which the practice resulting from it depends.

Two distinct kinds of collateral circulation are at present acknowledged: one by direct large communicating vessels; the other through the indirect medium of the capillary arteries, inosculating with each other. Where the direct communicating vessels exist, little subsequent change takes place in them. It is otherwise with the indirect capillary vessels. When the radial or ulnar artery is divided in the hand, the blood will not only flow readily from each end of the divided vessels, but equally red and arterial from both; the communication being through direct arterial branches from one vessel to the other. It will also be red and arterial if the division take place at the wrist; and may be so in the brachial, but if the femoral in the lower part of the thigh be wounded, the colour of the blood issuing from the lower end of the artery, if any issue at all, will be venous. It is so, because it has been obtained from the capillary arteries, which in this case being empty receive blood by regurgitation from the veins, the valves of which when present do not prevent its reflex course. If a limb be injected and carefully dissected four or five days after a ligature has been placed during life high up on the principal trunk, the capillary vessels will be seen to be well injected; but few or none will be found large enough to admit of their inosculation being traced throughout. If another limb be injected and dissected, some sixty days after the ligature had been applied,—and opportunities have occurred of making such dissections in man,—a difference will be distinctly observed between the two preparations. In the latter, the capillaries will not appear to be so fully injected, but several larger and more tortuous vessels will be found in situations where they were not expected to exist; and the anastomoses of these one with another, and generally by arches, may be traced to their communication with the principal trunk, both above and below the obliterated parts. If an incision were made in the nearest pervious portion of the lower part of an artery of a person who had undergone this operation, arterial blood would issue from it. The communication would have become direct by communicating branches, and the capillaries would have returned to their accustomed duties.

During the first twenty-four hours after the division of an artery such as the femoral, or the application of a ligature, the temperature of the limb is commonly diminished; after that period, and as the action of increase takes place, the temperature is usually from three to five degrees higher than in the opposite healthy limb. At the end of from eighteen to twenty-eight days, in a successful case, the temperature is found to be equal in both.

It is asserted by some sanguine supporters of the all-powerful influence of the collateral circulation, that it is sufficient at all times, and under all natural circumstances, to maintain the life of the extremity. The practice of the Peninsular war proved the fallacy of this opinion in too many instances, to admit of any doubt of its inadequacy to do so in the lower extremity after the division of the femoral artery, under ordinary circumstances. The fact of employment or of a new development of vessels having taken place after the commencement of the disease or the reception of the injury has been demonstrated by dissection, and it is through them the life of the limb is to be preserved.

It is most reasonable to conclude, that the collateral branches begin to enlarge shortly after the commencement of the disease, as a part of the curative process which nature endeavours to set up in most instances; the essential points of which are, in an extremity, 1st, the obliteration of the canal of the artery immediately above, and generally below the tumour; 2nd, the coagulation of the blood within it; 3rd, the enlargement of the collateral branches above and below it.

When a limb is lost through mortification, as the consequence of a division or obstruction of the principal artery, it usually takes place after the infliction of a sudden injury, in consequence of the collateral branches not having had time to enlarge.

In my work on injuries of arteries, and in this place, treating of the collateral circulation, I have asked the question:—"If the femoral artery be punctured near the groin, and a diffused aneurism form in a few days, extending up to Poupart's ligament; can the operation of placing a ligature on the external iliac be performed on the same principle, or with the same hope of success, as if the case had been one of true aneurism of several weeks or months' formation? The answer is in the negative. The Hunterian theory of aneurism is not applicable to the case. The surgeon who placed a ligature on the external iliac, under such circumstances, would probably lose his patient from mortification, because the collateral branches would not yet have had time to enlarge." I may now add, if he should escape this danger, there is the risk of inflammation of the peritoneum which has occurred to myself and to several others, and of the formation of matter behind it; or the wounds if not closed may bleed, or the diffused and spurious aneurism may enlarge from blood flowing into it from both ends of the artery, which are not partially closed, as in true aneurism; or it may suppurate, burst, and require in each case another operation, in order to suppress the bleeding. It is an operation which I shall show you cannot be supported on principle, which has not succeeded in practice, and which will be resorted to hereafter only as a last resource, when those means I have pointed out, have unfortunately failed; and when in all probability it will fail also.

The operation for placing a ligature on the subclavian artery, above the clavicle, in a case of wound of the axillary artery in the armpit, is equally inadmissible with that for applying a ligature to the external iliac for a wound of the artery in the groin, and ought alike to be abandoned. These are grave questions which interest the public more

than the profession. They only indirectly affect the anatomist and the surgeon, who does one operation with the same degree of knowledge and ability as the other. To the public, to the sufferer, they are questions of life or death. By that operation, which during the war in the Peninsula was found to be efficient, the sufferer has a fair hope of recovery; after the Hunterian operation, he may live through accidental circumstances only, which may be prayed for, but which can never be honestly and fairly expected. They should never therefore be trusted to, for nothing which is dependent on chance or accident can or ought to become a principle in surgery. The Hunterian theory of the cure of aneurism is totally and utterly inapplicable to the treatment of wounded arteries, accompanied by an open wound, however small or distant. It is always doubtful, and frequently dangerous and destructive even where the external wound has healed. A wounded artery should always be secured at the part where it is injured, and the greater number of those who suffer from such accidents, and are not so treated, will in all probability be lost, unless surgery can come to their assistance by ulterior and more painful operations.

When an aneurismal limb has been injected, on which an operation had not been performed, the collateral vessels have all been found larger and more fully shown than on the opposite side, although not to the same extent as in cases of a similar nature in which the operation had been done.

It is necessary that this enlargement of the collateral branches should take place an early period, because in many cases of aneurism the artery beyond or below the tumour is obliterated long before any operation is performed. The main supply of blood has been already cut off from the extremity, and the operation adds very little to the derangement of the circulation which has for some time taken place below the tumour. The following case shows the increase of collateral vessels so as to double the number on the opposite side.

Case 18.—Alexander M'Donald, 28th regiment, was admitted into Hilsea Depôt Hospital, for a gangrenous spot on the great toe of the right foot, which soon got well. Twelve days after his admission, a pulsating tumour was first observed in the ham of the same side. On the 7th of August the tumour was of the size of an egg, and the arterial action strong in every part of the body. He died suddenly, and on examination the right femoral artery, or of the diseased side, was larger than that of the left. The aneurism was situated exactly at the spot where the popliteal artery divides into the posterior and anterior tibial arteries, and was of the size of a walnut. The posterior tibial opened directly into the sac. The orifice of the anterior tibial artery, which had originally opened into the sac, was closed, as well as about three-eighths of an inch of the vessel. Within the space of six inches above the aneurismal sac, the artery gave off fourteen branches in pairs, larger than those in the opposite limb, which were only seven in number.

These facts appear to me to be conclusive: they show that the collateral circulation is not the same, is not in the same stage of preparation, in a limb suffering from a divided or wounded artery, as in one in which an aneurism has for some time existed; and they also show why mortification is more common after wounded arteries than after operations for aneurism.

Case 19.—Private J. Barnes, 29th Regiment, on the 16th of May, 1811, at the battle of Albuhera, received a musket ball in the right thigh, behind and above the knee, inclining downwards and inwards, close to the condyles of the femur, and in the direction of the femoral artery becoming popliteal; it bled violently at the moment, and so continued for a few minutes, during which time he conceives he lost two quarts of blood. It then ceased, and he was dressed in the usual slight manner, and remained two days upon the field of battle, until removed to Valverde, nine miles, on a bad road, and on men's shoulders, in a blanket converted into a bearer. He was considered as one of the slighter cases, until the gentleman in immediate charge of him requested me to see him, on account of his toes being in a state of mortification.

On the evening of the 3rd of June, eighteen days after the accident, the man was placed on a bullock car, to be removed with the rest of the wounded to Elvas; the mortification of the foot having ceased to increase, and a line of separation having been formed. Shortly after the cars moved, I was informed that he was bleeding from the wound: it evidently appeared to flow from the popliteal artery; and as it issued slowly, I supposed from the lower divided end. The foot being partly lost, I determined on amputation above the knee, which was performed at Olivença. The amputated limb was sent after me to Elvas, that it might be examined at leisure. I carefully traced the course of the wound, and found in it a little coagulated blood, but could not see the mouth of the vessel. A probe passed into the upper end of the artery was obstructed before it reached the ulcerated surface by nearly an inch; and on passing it up the lower one, it was stopped exactly in the middle of the track of the ball, by a veil or substance drawn across the mouth of the vessel, and which, on careful examination, showed the point of the probe at one part of the circle, although too small to let it through; and from this part I conceive the hemorrhage came. The divided ends were one inch apart. The upper, or femoral portion, for near an inch, contained a firm coagulum, filling up that part of the artery which had contracted like the neck of a claret bottle. The lower or popliteal portion of the artery had a very peculiar appearance; the substance drawn across appeared to have closed it completely at one time, and to have given way from the rough motion of the car at the point now open, and which is very small even when the sides of the artery are approximated. A very little soft coagulum was behind it; and if the man had not been removed, the vessel might have remained secure. This case shows very distinctly the means adopted by nature for the suppression of hemorrhage from both ends of a divided artery. The preparations I shall place in the Museum of the College of Surgeons.

Case 20.—In another soldier, under similar circumstances as to the nature of the wound and mortification of the foot; no hemorrhage took place on the journey to Elvas, but the man died three days after of mortification of the leg. He did not remain under my direction at Elvas, and no examination of the limb was made.

Case 21.—Serjeant Baptiste Pontheit, of the French 64th regiment, was wounded by a musket ball at the battle of Albuhera, on the upper and fore part of the thigh, which passed out behind, in the direction of the femoral artery. He lost a great quantity of blood at the time, to the best of his recollection, and the wound went on well until the 26th, ten days after the battle, when he felt something give way in his thigh, and found himself bleeding from the wound, which however soon ceased on pressing his hand upon it. In the afternoon on again moving, he lost about half a pint of florid blood, which induced the surgeon on duty to place a tourniquet on the limb, and inform me of the circumstance. When at leisure (in the course of two hours) I removed the tourniquet, and as no hemorrhage occurred, and there was no swelling in the vicinity of the wound, I replaced the dressing with a precautionary screw tourniquet, explaining to him its use, and the probable nature of his wound, together with the operation requisite to be performed in case of further bleeding.

I should before have mentioned that he was not a strong man, and was exceedingly anxious about his situation, and very restless: on turning at night he lost a little more blood, which ceased by his tightening the tourniquet, which was shortly after loosened. In the morning, every thing being removed, there appeared some swelling about the wound, the opening of which was filled up by a coagulum: gentle pressure being made, it readily turned out, and was followed by a stream of arterial blood, leaving little doubt of the femoral artery being wounded. Compression being made in the groin, I made an incision three inches and a half in length, taking the wound as a central point, and exposed the femoral artery and vein: both were wounded, the former being half destroyed in its circumference, surrounded with coagulated blood, and appearing as if it had sloughed from being touched by the ball, the course of which was directly past it, and I conceive would have carried it away, if it had not been for the elasticity of the artery. A ligature placed above, and another below the wound, secured both artery and vein; the incised wound was brought together by adhesive plaster, and the limb placed in a relaxed position. The operation was of short duration; he lost little or no blood, but the circulation was very languid, and the man exceedingly low. The warmth of the leg and foot was soon below the standard of the other; warm flannels were applied, and some brandy and water was given to him. In the evening the heat was more natural, and the man returned thanks for the humanity and kindness shown to him, congratulating himself and me upon the success of an operation which he had supposed to be infinitely more severe. The next morning he ate a tolerable breakfast, but felt a pricking sensation in the calf of the leg, which was as warm to the hand as the other, but the foot was cold. The second day, the swelling of the limb, its appearance, and discoloration on the under part, indicated approaching mortification, which on the 3rd was evident, and on the 4th at mid day he died, the limb up to the wound being nearly all in a gangrenous state. No adhesion had taken place in the wound, or in the artery, which showed the inner coat cut, the ligatures being firm, and no coagulum behind them. In this case, nature appeared from the first quite unequal to carry on any of the necessary operations; which may have arisen from the very debilitated state of the patient, as well as from the double obstruction to the circulation. He was a very gallant soldier, had been in twenty battles, was to me an object of solicitude, and had every attention it was in my power to bestow. He begged me to keep his watch, and although it is worth nothing, I do keep it as a relic of by-gone days.

Case 22.—Captain St. Pol, of the 7th or Royal Fusiliers, a son of his Majesty Louis Philippe, King of the French, by an English lady, was wounded in the ham from behind, whilst in the ditch at the foot of the great breach at Badajos. He fell instantly, and lost as he thinks, a considerable quantity of blood. On recovering he was raised from the ground, and walked a few paces prior to his being carried to his tent, where I saw him in the afternoon of the next day, the 7th. The leg had ceased to bleed before his arrival in camp. A substance could be felt on the inner side of the patella, which by the sensation communicated to the finger on moving it appeared to be the ball, which was extracted. A small artery was accidentally divided, and some dark-coloured blood also issued from the cavity; the ball was lying loose and unconnected; the finger on being passed into the joint which was swollen, discovered no splinters of bone, and the entrance of the ball behind would not admit the finger. His having walked some distance on the leg, and the absence of any splinters between the articulating extremities of the bones, induced Dr. Armstrong the surgeon of his regiment, and myself to think that the ball had entered with little injury to the bone; and after stating to the patient the little hope we had of ultimately saving the limb, independently of the great danger to which he was exposed, compared to the certainty of the operation of amputation at the moment, to which he would not consent, we assented to his retaining the limb for the present, thinking he would at least get through the inflammatory stage, when the operation could be performed satisfactorily to himself, although under much more unfavorable circumstances. The next day he was removed into Badajos on a litter, the heat of the tent being insupportable.

On the morning of the 9th I saw him early, being a friend in whom I took the greatest interest, when the want of circulation in the foot was evident from its having lost its natural colour and warmth; the knee was swelled, but not painful, and I had no doubt that the artery had been divided by the ball. The marbled appearance and tallow-white colour soon indicated the loss of the leg above the calf; and vesications formed on the foot, already of a green colour.

On the 12th the extent of the gangrene was defined, on the back of the knee up to the original wound, at its lower edge, gradually receding as it advanced to the fore-part of the leg, which for three

inches below the knee was apparently sound; the uneasiness of the knee being moderate, the incised wound looking perfectly healthy, although the latter had not united.

On the 16th the separation of the dead from the living parts having taken place behind, and being well marked and commencing on the fore part, the limb was amputated as low down as possible. Sixteen vessels were tied; the parts were gently brought together, without any hope of union.

On the 18th, there being some swelling of the stump, the strips of plaster were removed, one only remaining as a support to the vessels.

20th. Half the ligatures came away at once, they having gradually formed into two parcels; the stump was quite open, the bone well covered, and good granulations appearing, with a great discharge of well formed matter.

On the 22nd, his want of strength to carry on the necessary actions became apparent.

On the 24th, he died.

On examining the amputated limb, the popliteal nerve was found untouched, the ball having passed on the inside; the popliteal vein was also entire, having a small tumour adhering to its under part between it and the artery, the divided end of which was closed by a yellowish green firm substance, readily distinguishing it from the surrounding parts. On clearing the whole from the bone, and making a small circular opening into the tumour, which was elastic and covered with brown fibrous layers, it proved to be an aneurismal sac, smooth on the inside, containing florid arterial blood, and some little coagula. The cavity of the sac was not perfectly regular, being nearly divided on one side by a process running into it. The artery, on being carefully opened to the closed end, appeared to have been injured above the part divided by the ball, and to communicate with the sac by a small fissure or rupture. The end of the artery was then slit up, so as to show the very little thickness of the closing substance, and the great original contraction of the diameter of the vessel. There was no internal coagulum, neither was there any laid over the external part of the artery; between it and the bone there was a coagulum lying of the size of a small phial cork. Displeased with myself for having listened to Captain St. Pol's petition for delay, which I knew even under more favourable circumstances had been futile, I felt a melancholy satisfaction on viewing the diseased parts, which showed that process of nature in closing the artery completed, which in the former case had only been begun, although a longer period of time had elapsed.

We were inclined to suppose that the aneurismal sac existed prior to and independent of the gun-shot wound, considering that a sac of that nature could not be formed in ten days. Captain St. Pol did not remember any injury to have happened to, or any painful sensation to have existed in the knee before the accident; but Dr. Armstrong recollected his having once or twice mentioned some uneasiness in it, but in so casual a manner as not to have caused further inquiry. The other end of the artery I could not find from the gangrenous state of the parts. He was a remarkably handsome young man, and died beloved and regretted by every one.

Private P. Turnbull, of the grenadiers of the 74th regiment, of good stature, was wounded on the 10th of April, 1814, at Toulouse, by a musket ball passing from the inside to the outside of the middle of the thigh; he says it bled considerably at first, but soon ceased; the wound was not painful, and he thinks he observed the leg and foot to be colder than the rest of his body for the first two or three days, but did not much attend to it, further than conceiving the numbness, coldness, and impeded power of motion as natural to the wound.

On the 18th of April the gentleman in charge of this patient pointed him out to me as an extraordinary case of gangrene coming on without any, as he supposed sufficient cause; the wound on the outside of the thigh, or the exit of the ball, was nearly healed, and that on the inside was without inflammation or tumefaction, and with merely a little hardness to be felt on pressure. The pulsation of the artery could be distinctly felt to the edge of the wound, but not below it; the leg was warm, the gangrene confined to the toes. The artery of the other thigh could be distinctly traced down to the tendon of the triceps. As he was at a small hospital, about two miles from town, on the field of battle, I did not see him until the 20th, and again on the 23rd, when, although the gangrenous portion included all the toes, it had the appearance of having ceased. Satisfied that it would again extend, I left directions with the assistant-surgeon that the limb should be amputated below the knee.

The surgeon, who I had not seen, and who did not understand the subject, disobeyed the order, conceiving that there must be some mistake. At daylight on the 25th I was greatly annoyed on finding that the operation had not been done, and that the mortification had begun to spread the evening before. It was then too late. On the 26th it was above the ankle, with considerable swelling up to the knee. At night the man died; and the next morning at six o'clock I removed the femoral artery from Poupart's ligament to its passage through the triceps, which part was affected by the mortification.

The ball passed between the artery and vein in the spot where the vein is nearly situated behind it, and adherent only by cellular membrane, through which the ball made its passage, the coats of the vein being little injured, and those of the artery not destroyed in substance, although bruised; it was at this spot much contracted in size, and filled above and below by coagula, which prevented the transmission of blood, and the vein above and below the wound was filled by a coagulum, and was also impassable. This preparation is unique, and is perhaps the only one in existence proving the elasticity which vessels possess, and their capability of avoiding to a certain extent an injury about to be inflicted upon them. It will be hereafter in the museum of the Royal College of Surgeons, for public inspection.

CASE 24.—After the battle of Salamanca, I was requested to see a soldier of the fifth division, who had received a shot in the thigh nearly in a similar place, which had been followed by gangrene of the toes, not extending to the instep. The correctness of my opinions not being at that time acknowledged by my friend the surgeon, who showed the case to me from knowing my desire on the subject, he did not amputate when the mortification began to spread suddenly, and this man also died on the day after that occurrence.

CASE 25.—A Portuguese, at the same battle, suffered from a wound of a similar nature, but rather lower in the thigh. The mortification which followed was confined however to the great toe only, and great hopes were entertained that it would not spread, when hemorrhage unexpectedly took place from the wound, and the artery was tied some distance above it. The hemorrhage returned and was suppressed, but the patient sunk and died. On examination it was found that an additional, but this time an accidental error had been committed (I have seen it since done in London), and that a large branch from the femoral artery running parallel with it had been tied instead of the wounded artery itself, which had yielded by ulceration, not having been cut in the first instance.

CASE 26.—Don Bernardino Garcia Alvares, captain of the regiment of Laredo, thirty years of age, was wounded at the battle of Toulouse by a musket ball, which passed through the thigh, a little above its middle. The wound was not considered a dangerous one until the 30th, twenty days after the injury, when a considerable bleeding took place; and as the vessel from which it came seemed to be very deeply seated, the Spanish surgeon in charge tied the common femoral artery. I saw the gentleman in consequence of this having been done. The hemorrhage was suppressed by the operation, and the limb soon recovered its natural temperature, but gangrene made its appearance on the great toe on the third day afterwards. It did not seem to increase, but the limb swelled as if nature was endeavouring to set up sufficient action to maintain its life, and this continued until the tenth day after the operation, when he died completely exhausted. On the dissection of the limb, the femoral artery was found to be perfectly sound in every part below where the ligature had been applied. The vessel which bled could not be discovered; but it was certainly a branch from the profunda, and not the femoral itself. In this case the ligature of the femoral artery destroyed the patient, and the practice pursued must be condemned. The gunshot wound should have been largely dilated, at both orifices, if necessary, until the wounded vessel was discovered, which was in all probability not completely divided by the ulcerative or sloughing process which had taken place, and the division of it would in all probability have suppressed the bleeding. I shall refer to this case hereafter.

Cases of wounded arteries were not numerous after the battle of Waterloo, as far at least as they were observed in the hospitals in Brussels and at Antwerp.

CASE 27.—In one which occurred in a French prisoner in the Gend'armerie Hospital, and for which the femoral artery was tied, it proved fatal from gangrene of the foot and leg.

Three cases have occurred at the Westminster Hospital under my observation, in which mortification of the leg took place from injury to the popliteal artery. The two first were not under my care, and were both in my opinion lost, in consequence of the early signs of loss of life not being recognised until too late. They both died waiting for the mortification to stop by the establishment of a line of separation between the dead and the living parts, which under similar circumstances rarely takes place. In both these cases the amputation should have been done immediately above the knee, including and removing all the injured parts, and before inflammation had set in to any extent.

CASE 28.—A lady suffered from mortification of her right leg, without any obvious cause, and desired my attendance. The mortification resembled so much that which follows a divided artery, that I immediately examined the thigh, and found the femoral artery up to Poupart's ligament had become a hardened cord, without pulsation. She had suffered an attack of inflammation in it. A line of separation having been formed behind the knee, I amputated the thigh immediately above it. The lady died some days afterwards; and the limb and the artery are in the museum of the College of Surgeons.

The result of amputations, after a line of separation had been formed, during the Peninsular war was not favourable, it was in fact so much the reverse, when the constitution of the sufferer was impaired by disease or was otherwise unsound, that I was led to abandon it in many instances, and to adopt a different proceeding in the following case, which deserves consideration, inasmuch as I have little doubt that death would shortly have followed after an amputation.

CASE 29.—Richard Cook, aged fifty, a mason, whilst sitting on a square block of stone, on the 23rd February, was struck by another, which drove the popliteal space or ham against the edge of the block on which he sat, giving him great pain, and otherwise greatly bruising the leg, although no bones were fractured, nor was the skin torn. The limb on his admission, half an hour afterwards, into the Westminster Hospital, was much larger than the other, and of a dark reddish-blue colour, evidently from the bruise or extravasation of blood, which appeared to be still issuing from the vessel or vessels, as the limb continued to increase in size until it became at last greatly swollen. The pulsations of neither the anterior nor the posterior tibial artery could be distinguished through the swelling the next morning. The bowels were opened, and a cold spirit lotion was applied to the calf, and around the leg, and the swelling somewhat subsided, the limb becoming quite a blue black, which, with the tenseness of the parts, distinctly indicated the effusion of a large quantity of blood. It was soon obvious that greater mischief had occurred than had been expected, and on the 2nd of March, as vesications filled with a bloody fluid were formed on the outside of the leg over the fibula, and the whole limb was manifestly about to pass into a state of gangrene, if it had not already done so, I prepared everything for tying the popliteal or other arteries, if found necessary, and made a long and deep incision on the outer and back part of the leg, through the integuments and muscles, posterior to the fibula, and removed a considerable quantity of coagulated blood from between the muscles and from a large cavity which extended upwards into

the ham, without causing further hemorrhage, and in no part of which cavity could an artery be felt. The patient's countenance and body had assumed a jaundiced hue; the pulse was very quick, the tongue foul, the countenance sunken, the skin hot, the head wandering. Poultices of linseed meal and stale beer were applied, with gentle stimulating applications. Brandy and wine were ordered in proper quantity every hour or two, with sufficient doses of the muriate of morphia at night to allay irritation, and to induce sleep. The incision, together with these remedies, gave great relief, and on the 7th the man seemed to have been saved from a state of the most imminent danger. On the 8th the pulse was 112, the tongue clean, the skin of a whiter colour, the bowels opened by injections; eight ounces of brandy were given in the twenty-four hours; wine, with sago, arrow-root, jelly, oranges, and anything he chose to ask for. The greatest cleanliness was observed, and the chloride of lime was used in profusion all around him. The mortification of the limb was complete, a line of separation formed about four inches below the knee in front, and extended behind towards the ham. On the 26th, the dead parts having almost entirely separated from the bones all round, those which remained were cut through where dead, and the bones were sawn through about five inches below the knee, and the lower part of the limb removed, leaving an irregular and in part granulating stump, with an inch of bone projecting from it. On the 24th of May this portion was found to be loose, diluted nitric acid had been applied to its surface, and on the 20th of June it separated. On the 16th of August Cook left the hospital in good health, with a very good stump, having cost the hospital £57 in extra diet.

In this case, there can be little doubt of the popliteal artery having been torn, and if the incision made on the 2nd had been had recourse to during the first two or three days, and the artery sought for, and secured if found bleeding, it is possible the mortification might have been prevented, although it is probable, from the pressure arising from the great extravasation and coagulation of blood, that the collateral circulation was so much impeded as not to have been able to maintain the life of the limb below, even during that time. The incision made on the 7th saved the life of the patient by taking off the tension of the part, and relieving thereby in a remarkable manner the constitutional irritation which hourly appeared likely to destroy him; indeed, no one expected anything but his dissolution. When the line of separation had formed, he was evidently unequal to undergo the operation of amputation, to make a good stump without great risk, and the dead parts were therefore merely separated for the sake of cleanliness and comfort. Experience had demonstrated in too many cases of the kind that the formal operation of amputation at this time as recommended by most modern surgeons would in all probability have cost him his life.

CASE 30.—In 1834 I placed a ligature of strong dentist's silk on the right common iliac artery of a lady of middle age for a swelling in the hip, supposed to be a gluteal aneurism, and which, after commencing the operation, was found to occupy a considerable part of the iliac region. The lady died a year afterwards, and it was then found that the ligature had been applied at the distance of five-eighths of an inch from the bifurcation of the aorta, and three-eighths of an inch above the origin of the internal iliac, independently of the line of separation between the parts of the iliac divided by the ligature, and which does not seem to be wider than the ligature itself. The separated ends were united at the point of separation by new matter, the orifice or end of each being closed by a very narrow barrier, the inner coat of the artery being redder than natural, somewhat irregular and contracted, and containing hardly any coagulum, thus proving the fact, in the largest artery in the body save one, that a coagulum is not necessary for the safety of the union; while the immediate vicinity of so large a vessel as the internal iliac, to say nothing of the [illegible] itself, also proves that the danger hitherto [illegible]ed from the neighbourhood of a collateral is more imaginary than real—two great [illegible] the practice of the Peninsular war led me to declare, and which can no longer be doubted.

The preparation exemplifying these points is in the Museum of the Royal College of Surgeons, together with the ligature, still carrying in its noose the portion of the artery it strangulated and brought away with it.

The mortification of the extremity, which, from what I have said, might reasonably have been expected to take place from a defective or unestablished collateral circulation, was, I apprehend, prevented by keeping up a regular gentle friction, by the hands of a nurse, on the foot and leg up to the knee, for the first twenty-four hours almost without intermission, and at short intervals afterwards, until the re-establishment of the circulation could not be doubted. I had previously tried it in a case of inguinal aneurism, for which I had placed a ligature on the external iliac artery, less than an inch from its origin from the common iliac, by a similar operation, not knowing which vessel I should have to tie, from the extension of the tumour upwards, in which case it succeeded equally well; and I am not without hope that if this practice should be duly followed up in all cases of wounded arteries of the lower extremity, and in some of the upper, that the danger from mortification may be greatly obviated.

Some practical deductions may be made from these facts.

1. That the theory of the operation of aneurism, as dependent on the collateral circulation, cannot be applied with safety to spurious aneurisms of recent occurrence dependent on wounded arteries.

2. That it is inapplicable to wounded and bleeding arteries.

3. That the length of time a spontaneous aneurism has existed is of consequence, as connected with the collateral circulation; although an aneurism should never be allowed to attain that size which may render it injurious to the surrounding parts.

4. The collateral vessels are at all times and, under all natural circumstances capable of carrying on the circulation in the upper extremity, whatever disease or injury may affect the principal trunk, provided a due degree of care be taken to maintain the temperature of the part. Whenever the reverse takes place, it is an exception to the general rule.

5. After operations for aneurisms in the lower extremity, the collateral branches are almost always equal to carry on the circulation through the limb.

6. When the principal artery of the lower extremity is suddenly divided, without any previous disease having existed, mortification is not an uncommon occurrence, and is more likely to take place in old than in young persons.

7. When under such circumstances the principal vein is also divided, mortification seldom fails to be the consequence.

A Course of Lectures on Hernia,

BY JOHN FLINT SOUTH, Esq.,

Surgeon to St. Thomas' Hospital, and Professor of Surgery to the Royal College of Surgeons.

(Delivered in the Theatre of the College, and revised by the Professor for the MEDICAL TIMES.)

LECTURE II., continued.

Chronic and inflammatory strangulation—spasmodic strangulation—Remarks on coughing, as affecting strangulated ruptures—Mr. Luke's opinions—Bulk of a rupture, as affecting the symptoms of strangulation—Strangulation in irreducible ruptures, without increase of the bowel protruded. More common causes of strangulation: possibility of distinguishing the contents of the sac. Mr. Pott's case. Elasticity. Doughy feel. Necessity of careful inquiry into all cases of peritonitis and enteritis. Treatment of strangulated rupture; Taxis; Precautions; Necessary aids to its use; Mode of application; Effects of large quantities of fluid in the sac; Effects of a band in lower part of the sac; Hot bath; Bleeding; Blood should be drawn rapidly. Remarks on the effects of violence in the use of the taxis; Petit's opinions; Bodily reduction. Cases of Le Dran, De la Faye, Arnaud, Scarpa, Sabatier, Sanson, Dupuytren, Sir Charles Bell. Case by Green and Callaway; Case by Bransby Cooper; Neglect of this subject by English surgeons; Mr. Luke's paper in the Royal Medical and Chirurgical Transactions.

The symptoms of strangulation may be comparatively slight, or they may be severe; they may creep on slowly and insidiously, or they may come on quickly. Hence they have been described by some surgical writers as being indicative of chronic or of inflammatory strangulation. The condition of the strangulated bowel does not, however, sustain these designations; for very commonly, severe symptoms set in immediately on strangulation taking place, and depend rather on the tightness with which the bowel is girt than on inflammatory action, which is a consequence rather than a condition of strangulation; a circumstance arising out of the unnatural state of the gut and not that which causes it, and the first step on the part of the constitution to provide against the mischief which will of necessity ensue, should the strangulation be left unrelieved. A spasmodic strangulation is also occasionally spoken of, but improperly, for except in ventral and phrenic ruptures, in which the protrusion is through the muscular fibres, the muscles do not exert any material influence on the apertures by which the bowels escape, and consequently have nothing to do with the matter.

There is a symptom ascribed to strangulated ruptures by some surgeons which it might be supposed I had overlooked; but I have purposely omitted mentioning it till now, because as I believe it neither can nor does exist, I think it has been improperly included—I mean dilatation of a strangulated rupture on coughing or sneezing. If the strangulation be sufficiently tight to prevent the return of the bowel into the belly, in the ordinary methods of attempting its reduction, it will also be sufficiently tight to prevent the protrusion of more bowel through the mouth of the sac, which is choked by that already escaped; and the tightness with which the gut is girt is, as almost every surgeon must have observed who has had ordinary experience in the treatment of this disease, so complete, that in operating on a strangulated rupture, after the sac has been opened and the gut exposed so that it can be compressed with the greatest effect, yet it cannot generally be emptied of its contents, either fluid or air, nor is more gut forced down, nor the bulk of that already escaped increased by the patient's cries, nor by his holding his breath that he may better bear his pains. There is no alteration in the bulk of the protruded bowel, nor is any more forced out; and this, therefore, must be considered to prove that a strangulated rupture cannot dilate. I readily admit that in strangulation, when the patient is directed to cough there is often an impulse, a forcing of the rupture-swelling against the hand which grasps it, but this is not dilatation, and arises from a totally different cause, which will be best understood if, by anticipation, I refer to scrotal rupture. The part of the sac in which the rupture is strangulated is sometimes at the external, sometimes at the internal abdominal ring. If the former, when the patient coughs, he forces more bowel into the inguinal canal, which drives against the stricture and strictured part, and thrusting down bodily the sac and its contents, pushes it against the hand and thus produces an impulse, but without increasing the actual size of the rupture below the stricture by forcing anything into it, consequently *it does not dilate*. Again, if the stricture be at the internal ring, the effort of coughing forces the bowels in the belly against it and the bowel which it tightly girts, and driving the sac with its contents below, forces it against the hand, and produces an impulse, but still without dilating or increasing the bulk of the contents of the sac below the stricture.

Now, although this is undoubtedly the general rule, yet there is an exception which actually supports it. When the strangulation is not in or near the mouth of the sac, but when it is caused by a fibrous band crossing from one to the other side of the sac, then, when the patient coughs, more bowel is forced through the mouth of the sac, and the rupture-sac is dilated by the additional quantity of bowel for the time thrust out, and which, is very different from the impulse felt under the former circumstances.

In this way, I think, may be fairly and truly explained that which is commonly called dilatation of

a strangulated rupture during coughing, which is no actual enlargement of the rupture, swelling itself, but simply an alteration of its position by the driving of the bowel above against the stricture at whatever part situate, provided such stricture be not formed by a fibrous band or omentum, in the body of the sac.

For the first notice of this fact, so far as I am aware, we are indebted to Mr. Luke, who does not, however, direct it to the explanation which I have given, but simply to the determination of the seat of stricture in a rupture. He says, "If the body of a hernial tumour be compressed by the hand, an impulse is given to all its parts below the seat of stricture; but if the neck of the hernia be grasped between the finger and thumb of the other hand above the stricture, while such compression is made, there will not be any impulse felt." It is true, indeed, that he does not oppose the terms impulse and dilatation, but it is equally true that the two expressions convey decidedly different meanings, and designate different kinds of action in the rupture.

The symptoms of strangulation are not violent in proportion to the great bulk of a rupture, but rather the contrary, as they are usually more severe when the rupture is of small size. The easy explanation of this is afforded by bearing in mind that the symptoms are proportioned to the tightness with which the protruded bowel is girt by the stricture, which must necessarily be less when the rupture has a large mouth, and permits a large protrusion of bowel that cannot be so completely and immediately constringed, as when the aperture of the sac is small, and the protruded bowel of small quantity. In addition to which it may be observed that the mouth of an old rupture-sac is more accustomed to the pressure of the long protruded bowel, than a small and newly-formed rupture, the mouth of which violently opposes the protrusion, and consequently more tightly girts the bowel which has passed through it.

Strangulation may follow an irreducible rupture, without any increase of the protrusion, but simply by the lodgment of fæces in the protruded bowel, or even by the collection of air within, so that it becomes distended, and cuts off the communication between the bowel above and that below the rupture. Or its distension may so interfere with the vessels of the bowel, that the blood being unable to return by the veins, its serous part is poured out into the cellular tissue of the bowel, so that the thickness of its walls is greatly increased, and thus by its greater bulk, it actually strangulates itself completely, if it had not done so before.

More commonly, however, strangulation results from the sudden escape, on exertion, of more bowel than usually passes through the mouth of the rupture-sac, which will yield, to a certain extent, to the force exerted against it; but when the force is withdrawn, the mouth of the sac recovers its ordinary size, grips the protruded bowel so tightly as to prevent it moving one way or other, and thus causes strangulation. Here again, also, when the bowel has become constricted, the return of the blood is less or more prevented, according to the tightness with which the gut is girt, and serum is poured into its cellular tissue, so that it becomes of larger bulk than natural, and by so much less capable of being returned and renders its strangulation still more tight.

It is frequently said that the contents of a rupture-sac can be distinguished from each other; this, however, I very much doubt, and more especially as it often happens that both intestine and omentum form the contents of the sac.

It is said that the symptoms of strangulation are less severe in omental than in intestinal strangulation; but Mr. Pott's case, to which I have already alluded, shows that the descent of omentum alone, even without strangulation, will produce vomiting —one of the most important signs of that condition —whilst, on the contrary, gut is often found strangulated, when there has been little or no vomiting. The elastic feel is also often mentioned as a symptom of intestinal protrusion, and a doughy feel as that of omentum. These, however, are very uncertain characters, as, when a rupture has been coarsely handled, a not unfrequent occurrence, serum may be poured into it, or even blood extravasated, and the doughy feel produced, though the sac contain only gut, whilst, on the contrary, there may be much fluid in the sac, together with omentum, and little or no intestine, and thus the swelling be elastic. Practical experience, therefore, shows that attempts to distinguish between the contents of the sac are uncertain and unsatisfactory, and it may be added useless, as the requisite treatment is the same under both conditions.

As the symptoms of inflamed peritoneum, or of inflamed bowel, or both together, when arising from other causes, are similar to those observed immediately or very soon after strangulation has taken place, and as the former requires only medical treatment, whilst the latter continues increasing till relieved by the surgeon; it is always of the utmost importance that when such symptoms set in, careful inquiry should be made as to the existence of any swelling upon or in the neighbourhood of the belly, which can possibly be a rupture and the cause of such symptoms. And if there be doubt of the truthfulness of the patient's answers, or suspicion that the questions put be not understood, an examination must be made, so that the medical attendant's mind should be freed from doubt. This more specially applies to women, who though aware of the existence of such tumours, either through ignorance or false notions of modesty, conceal them, and consequently die from want of surgical relief; it must not, however, be forgotten that there may exist at the same time peritoneal inflammation, and swellings on or in the neighbourhood of the belly, and yet neither connected with the other, as such swellings are not always produced by ruptures. The tumours which may be confounded with ruptures, will be more conveniently noticed when treatment of particular ruptures with which one kind or another of swellings has resemblance. At present it is only necessary to direct attention to the fact.

Treatment.—When a rupture is strangulated, and the symptoms already described have appeared, the object of the surgeon should be to return its contents as speedily, cautiously, and perfectly as possible. This is done in the less close constriction of the bowel by a peculiar kind of handling, to which the term taxis is applied, either alone or aided by constitutional treatment; or, if the confinement of the bowel be so complete that these are unavailing, then recourse must be speedily had to a surgical operation by which the constriction is removed, and the contents of the rupture returned into the belly, after which, under favourable circumstances, the symptoms subside, and the patient recovers.

Use of the Taxis, &c.—Previously to attempting reduction by the taxis it is advisable to place the patient in such a posture as will completely relax the abdominal muscles, and prevent them offering any great resistance, in the patient's straining, to the efforts making for the return of the bowel. The relaxation of the muscles has also in some cases a beneficial effect on the mouth of the rupture-sac itself, by freeing it from such further confinement as they to a certain extent are capable of exerting on it. The patient should therefore be laid on a sofa or bed, upon his back, with his shoulders and nates well raised, whilst the back and loins are sunk at the same time; the knees are to be bent up towards the belly, close together, and the soles of the feet resting on the bed. The surgeon then, with his right hand, grasps if possible, the whole swelling, having its base in the hollow of his palm, and the fingers and thumb spread lengthways over it, and their tips directed towards the neck of the rupture. With the fingers and thumb of the left hand he grasps the swelling at the neck, and at a right angle to the other hand. The hands being thus placed, with the right he makes gentle pressure over the whole swelling, by which the fluid, more or less in quantity, usually there existing, gradually flows back into the belly, and then presses the solid contents of the sac up towards its mouth. Whilst this is doing, the fingers and thumb of the other hand are alternately moving, to thrust up by little and little, or as it were to knead, small portions of the protruded bowel into the mouth of the sac. If these efforts be successful, a movement is felt in the contents of the sac, and if gut have been protruded, not unfrequently a slight gurgling is sometimes felt, and at other times even heard, which is a favourable sign, as showing that the contents of the protruded bowel are passing into that within the belly, and commonly, soon after this occurs, the bowel itself moves more rapidly, and often at last escapes from the sac with a rush. At other times no gurgling is perceived, but the bowel is felt slowly moving from the fingers, till the sac has become completely empty.

Occasionally it happens that the quantity of fluid in the cavity of the sac is so large, and that of bowel so small, that comparatively little effort diminishes the size of the rupture so considerably that the reduction is thought to have been perfected, and the surgeon is satisfied, and leaves off the handling. But to his disappointment he finds, in a short time, the swelling as large as ever. He presumes the rupture has again descended by the patient's improper exertion during his absence, and repeats the taxis with similar effect; the swelling, he believes, has been got rid of, but after a time it reappears, and he then becomes puzzled with the case, as he feels convinced he has again and again returned the contents of the sac. Such a case is by no means unfrequent, and is an annoyance to inexperienced or thoughtless persons; but the difficulty is easily explained: the surgeon has merely emptied the fluid from the sac, and has left the bowel unreduced. Considerable diminution in the size of the rupture may also take place by the use of the taxis, when the strangulation is caused by a band in the lower part of the sac. This, of course, depends upon the gut above the stricture being emptied of its contents, whilst the strangulated portion remains undiminished in size, and unchanged in place. Therefore, when this happens, it must be recollected that the patient's danger is unrelieved, and that the operation will be required.

When the reduction is effected, the finger can be pushed almost invariably up through the mouth of the sac into the belly; and until this can be done, it cannot be determined that the bowel is returned. The practitioner, therefore, should not give up till he finds he can do this, and if he cannot, he may presume that an operation is necessary for the patient's relief, and should be resorted to without delay.

It is the ordinary practice to attempt reduction in the way described, before resorting to any constitutional treatment, by which it may be rendered more easy; but if this do not soon succeed, it is better at once to depress the patient's powers by putting him into a hot bath, if it can be readily obtained; and bleeding him quickly till he be ready to faint, or actually does faint. But if the bath cannot be procured, then bleeding should be resorted to. It would seem scarcely worth while to observe that the blood should be taken quickly, and by a large orifice, were it not that this is too frequently unattended to. But this is a point of much importance; it is not the *quantity* of the blood taken, but the *quickness* with which it is drawn, that produces the desired sudden effect upon the constitution. Twice as much taken from a small opening and slowly, will not have the effect which less than half has, when drawn from a large wound and quickly. The patient then having been kept in the bath for a sufficient time to make him feel faintish, should be directed to stand up, a vein in one or both arms freely opened, and the blood allowed to flow till he begin to totter, and then just as he is on the point of dropping, he should be quickly laid down, and the taxis immediately employed, as he is then, in consequence of the great prostration of his strength, in the most favourable condition for effecting reduction, which frequently is managed under such circumstances. If, however, the strangulation cannot be overcome, the operation must be resorted to; but it is always advisable after the patient has been removed from the bath, and either temporarily put to bed whilst the necessary preparations are made, or even when he is placed on the table, to make one last effort at reduction, as I have more than once or twice known this final attempt successful, which may be presumed to have depended on some small portion of the protruded bowel having been drawn from within the stricture by the swaying of the bowels within the belly one way or another in the mere act of lifting the patient about; and, as I have already mentioned,

it commonly happens that when a small portion of the constricted bowel has moved, or been moved from within the stricture into the belly, the rest may usually be made to follow.

In employing the taxis care must be taken that violent pressure should not be made; and also that even moderate pressure should not be too long persisted in, as from both these causes the patient's danger is considerably increased; and to them may be ascribed the unfavourable condition in which patients are too frequently, when brought to the hospital, in addition to the too long delay of the operation. The most common result of this improper treatment is that the swelling is rendered so exceedingly tender, that it will not bear the most gentle handling without great pain. When this is the case, it is always best to bleed the patient before making any further attempt with the taxis, and when this is employed, it must be with great caution, or the surgeon will complete the bad treatment already commenced, by bursting the gut, if gut be down. If, therefore, there be much tenderness, and more especially if the skin be inflamed, and the cellular tissue loaded with serum, or it may be with extravasated blood consequent on the violent efforts already made, it is better after having gently ascertained the fixedness of the rupture, at once to proceed to operate, and not unfrequently when the sac has been laid open, the bruised state of the bowel, and the bloody serum in which it is bathed will certify the propriety of the proceeding.

Petit warns against violence in the use of the taxis, and still more to its repetition:—"It is always dangerous," says he, "and still more so when there is any hard, pointed foreign substance in the intestine, as in the case of a cook, who had swallowed a lark's leg; he had been so worn out for three days by the rough and repeated compression to which he had been subjected by a truss-maker, that it might be readily imagined such handling would not only cause gangrene, but tear and pierce the gut. I have seen," he continues, "a woman, sixty years old, in the same condition from a large pin; which I found after having opened the sac; part of it was in the gut, and part in the sac with a considerable quantity of stercoraceous matter. In other instances I have found worms, cherry and plum-stones, raisin-stones, and the small bones of sheeps'-feet: in the latter case fifteen days had passed since the bones had been swallowed, in eating a fricassee of feet." In the College Museum is an example of the protruded gut being choked up with apple or potato peel.

These foreign substances can sometimes be emptied from the gut, of which Petit mentions a case in which he "found cherry-stones in such quantity that they completely filled the whole of the gut in the rupture; he fortunately succeeded in passing them into the part within the belly, and reduced the rupture."

When the gut is burst by violence, the swelling either entirely or in part almost immediately subsides, the contents of the bowel quickly finding their way into the cavity of the belly, and the patient dies, sometimes without and sometimes with symptoms of peritoneal inflammation; but the burst intestine commonly remains in the sac.

Another and equally dangerous result, if undiscovered, of violent application of the taxis, is the reduction of the peritoneal sac and its contents still contained within it, into the cavity of the belly, either before or behind the peritoneum, as may chance. This is called by the French surgeons, "reduction en masse," or "reduction en bloc," and which we call after them "reduction in mass," but which would perhaps be better designated by the workman's phrase "bodily," and we should then call it a "bodily reduction of the rupture." Fortunately for us such occurrences are but rare in this country, and very few museums present examples of such unwarrantable violence.

[illegible]e accident was first noticed and described by Le Dran, in a case of femoral rupture, which had been reduced twenty-four hours after strangulation The symptoms continued, and at a week's end Le Dran was called to visit the patient, but it was too late to attempt any operation, and on the following day he died The [illegible]geon first in attendance stated that at the time of the reduction he did not hear [illegible] noise the intestine generally makes when it enters the belly; and that the parts composing the rupture passed in a heap under the ligament like a tennis-ball." Upon opening the body "the hernial sac was found in the belly (at what part is not stated), about three inches in depth and eight in circumference, and within it was contained half an ell of the jejunum." Other cases are mentioned by De la Faye, Arnaud, and Scarpa; more recently Sabatier, Sanson, and Dupuytren have also met with them, and the latter no less than six. Sir Charles Bell mentions a case of this kind.

The museum of this college possesses a preparation of an inguinal rupture which had been reduced in mass between the abdominal and iliac muscles and the peritoneum; part lies below the crural arch, and extends outwards nearly as far as the crural vessels. It forms a large swelling inwards towards the cavity of the belly, but is not visible externally. The rupture had been of long duration, and the patient had never worn a truss, but he was not inconvenienced by it, nor had ever any difficulty in returning it till it became strangulated.

Another case occurred to my friends Green and Callaway. The patient several years before had, whilst in Spain, symptoms of strangulation, and a swelling in the scrotum, which having been pushed up by a Spanish surgeon, after a time the symptoms subsided, and he had no further inconvenience till 1836, when he had a swelling in the left (the same) side of the scrotum, accompanied with symptoms of strangulation. It was transparent and irreducible. No relief having been obtained by medicine, it was determined to perform an exploratory operation. A cut was, therefore, made into the swelling, which evacuated the fluid, and the finger being introduced, moved freely about, and the intestines were felt, as it seemed, in the general cavity of the belly, and free from strangulation. The symptoms, however, continued, and he died a few days after. On examination it was found that the finger did not pass from the cavity opened in the scrotum into the general cavity of the peritoneum, but into a large sac lying between the iliac fascia and iliacus muscle, and containing the intestines which were strangulated in a small aperture at the upper and inner side of the sac, where was the communication with the cavity of the belly The testicle lay behind the scrotal sac just at the external ring. Mr. Green presumes that the rupture was originally congenital, that the whole rupture and testicle had been violently thrust up into the belly by the Spanish surgeon, the sac doubling on itself; but that the intestine had then partially or completely relieved itself; that the sac had subsequently lengthened downwards, forming the tumour filled with fluid, which was contained in the scrotum, and had been cut into.

Mr. Bransby Cooper has also mentioned, in Guy's Hospital Reports, a case of reduction in mass, under his care in 1839, in which there were two sacs.

ORIGINAL CONTRIBUTIONS.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

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FIBROUS TUMOUR.

(Continued from page 41)

Mrs. W., aged thirty-five, tall, emaciated, haggard September 27, 1845.—Much pain of abdomen extending over the whole of the lower half, close down to the symphisis pubis and to the sides, increased to intense suffering by pressure and moving about, especially in a carriage; constant sensation of throbbing in the abdomen and of internal movements, like those of a fœtus, with a feeling of weight and pressure in and about the pelvis, occasionally amounting to acute pain; much gastric irritability bowels in a very unhealthy condition; leucorrhœa great debility and occasional faintings.

Married Nov., 1843—became pregnant January, 1844. Had severe morning sickness and other sympathetic derangements, which lasted until October. She had a slight show of the catamenia at the end of the first month, and a slight trace at the end of the second; in other respects she enjoyed good health during pregnancy. In October she was delivered, after a severe labour of thirty-six hours' duration, of a full-grown fœtus, which appears to have died ten days before birth. She recovered quickly, and continued remarkably well until February, 1845, when she was exposed to considerable mental excitement and alarm, supposing herself at the time to be some weeks advanced in her second pregnancy, having missed once or twice. A slight show of the catamenia appeared in March. In April she had rather a severe fall, and in two days afterwards was seized with a violent flooding, by which she was much reduced. In seven weeks after this event she again missed a catamenial period, and shortly afterwards had what was supposed to be a miscarriage, but she did not decrease in size. In the course of a week or two she began to have a sensation of movements in the abdomen, like those of a fœtus, which have continued ever since. In seven weeks after the supposed miscarriage she had another flooding, during all which period she had many pains and other sensations which she had never experienced except when pregnant, but she was unable to lie in any posture except upon the left side with one knee bent strongly on the body. From about the time that she first felt the fœtal movements she began to have violent pulsation in the abdomen, particularly about the umbilicus.

In August her medical man, and also a married female friend, considered that they had distinctly felt the movements of the child in the lower part of the abdomen on the left side, but not at all on the right side. Since then she has continually had a painful sensation of weight in the pelvis, which at times is very acute, and a constant feeling of a foreign body situated just above the symphisis pubis, increased on moving or by any shock.

Very early in the present month, whilst lying on the sofa, she was suddenly seized with violent pain in the back and loins, more like labour-pains than anything else, except that the pain was constant, without intermission. She had severe vomiting, which lasted for four days; on the second she threw up a large quantity of green bile. Since the second attack of hemorrhage the size of the abdomen has gradually diminished, and since the above mentioned bilious attack, during which she took some active doses of calomel, she has diminished still considerably, so that now she is not much above her ordinary size. About a fortnight ago the discharge again returned and lasted four days; it was without coagula, and resembled the catamenia.

Examination of Abdomen.—A deep-seated hardness, intensely tender when reached by the pressure of the finger through the abdominal parietes, is to be felt extending from behind the symphisis pubis (where it seems in contact with the posterior part of the fundus uteri which it pushes forwards) up to or above the umbilicus, extending two or three inches to the left of the median line, and to a much greater distance on the right side. The edge appears well-defined wherever I can feel it

Examination per Vaginam and Rectum.—The uterus, as far as can be reached per vaginam, is small, but normal; the os and cervix, small, but soft and not tender; the uterine sound passes easily upwards and forwards to the natural extent; pressure with the hand close behind the symphisis pubis, and somewhat to the right, moves the uterus very distinctly.

I merely prescribed a slight laxative, and on September 29th requested my friend, Professor Simpson, of Edinburgh, who happened to be then in town, to meet me in consultation. On passing the sound, he succeeded in introducing it further than I had done, viz., beyond a sort of prominence, which I had supposed was the fundus; it then ascended to a considerable distance above the symphisis pubis, so that the movement of its point could be distinctly felt through the anterior wall of the abdomen. He, therefore, came to the conclusion, that this elongation of the uterine cavity was owing to the presence of a fibrous tumour occupying the posterior wall of the uterus, portions of which could be felt through the abdominal parietes, and, from the pain produced by external and internal examination, that it was in an actively

inflammatory condition. He advised leeches to be applied per vaginam; a slight mercurial course, and the application of mercurial ointment to the os and cervix uteri.

October 14.—Since last report eight leeches have been twice applied to the upper part of the vagina, behind the cervix uteri; they bled very freely each time, with manifest diminution in the tenderness of the mass; it is difficult to say whether any alteration in size is perceptible. She has taken pil. hydrarg. gr. v every night for ten nights, when the mouth became slightly affected; but in four days afterwards she caught a slight cold, and suffered extremely from salivation, sore mouth, and pain of face, which was relieved by fomenting with hot decoction of poppy. Bowels have been kept open by the following pill:—

R. Extr. aloes aquosi, ℈ij; Extr. hyosc., ℈iss; Mastiches, gr. xij. M. ft. pil., xx; Sumat ij, h. s.

24.—Mouth nearly well; feels much better; has had no attack of severe pain for the last five days. Throbbing continues at times, but in less degree. Since the last leeching there has been much pain across the lower part of back, with a brownish watery discharge, sometimes very dark, thick, and fetid; much headache; bowels more open since she has returned to her usual diet; spirits are better. The size of abdomen varies at times considerably, but she thinks that occasionally it returns quite to the natural size; it is decidedly much smaller since coming to London. Pt. pil.

30.—Leeches were applied on the 28th, in consequence of increased pain, throbbing, and tenderness of abdomen after going out in the carriage. The leeches bled well and with relief.

November 11.—Cervix uteri *distinctly* longer. I fancy that the tumour is less on the left side; there is *much* less pain at this spot, nor does it seem to extend so high up.

Having directed the speculum carefully *behind* the cervix uteri, it passed to its fullest extent; eight leeches were applied to this part, and apparently with better effect than ever.

27.—Leeches were again applied on the 21st, but did not take so well this time. A considerable discharge, like catamenia, came on yesterday, but it does not seem to have weakened her much. The tumour is certainly less painful. As the bowels are not sufficiently open, I ordered

R. Pil. hydrarg., Extr. coloc. co., ãã gr. v, hâc nocte sumenda.

R. Acid. hydrochlor. dil.; Acid. nitrici dil., ãã m. viij; Syrupi aurant., ʒj. Infusi gentianæ co., Infus. sennæ co., ãã ℥v. M. ft. haust. bis die sumend.

I continued to apply leeches at intervals of about a fortnight, until February, regulating the bowels with an occasional brisk purge, or by the above-mentioned draught. Not only had the general health improved considerably, and she had gained flesh, but the tumour could not be felt so distinctly through the abdominal parietes, and pressure during the examination produced but little pain.

On the 13th of February I began to apply the unguentum hydrargyri fortius, rendered harder with a little ceratum cetacei, to the os uteri. I imbedded the os and cervix in this preparation, and passed up a dossil of lint well greased to prevent its coming away. These applications were repeated every two or three days for some time, interrupted occasionally either on account of the catamenia being present, or for the purpose of applying more leeches. The improvement of health, strength, and good looks was very striking; she lost all the sensations and other symptoms from which she was suffering when she first arrived in town, and declared she felt quite unconscious of anything being the matter with her. It now required careful manipulation to distinguish even any portion of the tumour through the abdominal integuments; the cervix uteri and as much of the uterus as could be reached with the finger per vaginam appeared quite natural. The bowels still require careful management to prevent accumulation taking place, which invariably produces symptoms of pain and congestion about the pelvis. She has returned to her home in the West of England, with directions to have the ointment applied from time to time.

My observations on this long and interesting case I must delay until my next report.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE CASES.

FIRST SERIES.

Reported by J. S. FLETCHER, Esq., Student at the Manchester Royal Infirmary.

SURGICAL CASES.

CASE VI.

Concussion of the Brain, followed by Inflammation —Simple Fracture of the Right Femur.

Robert Fellows, aged ten, from Peel-street, Hulme, was admitted at half-past twelve, p.m., on the 5th of February, 1845, into the hospital, under the care of Mr. Thorpe. He is a stout robust looking lad, of light complexion; his previous general health has been good, having had little ailment except congenital hernia, for which he has worn a truss.

The account given of the present accident is, that whilst he was standing at the edge of some flags in the street, about an hour previous to his admission, some railings and flags fell upon him from behind, knocking him down, and the consequence was that his face and head came with considerable force against the ground. He was perfectly insensible at the time, and was picked up and carried to the hospital, and when admitted presented the following symptoms:—

He lay very still; surface was pale and cold; pulse was weak and frequent; respiration slow; he was occasionally sensible, and answered questions rationally when roused; the pupils were somewhat contracted. He seemed to suffer pain from the wounds. The right thigh was fractured obliquely through the middle third of the bone—it was a simple fracture. The right hand was much crushed and bruised. The face and head were considerably bruised and injured, the skin of the face being lacerated in several points; the left eye was much swollen, and he could with difficulty open it; there were some slight scalp wounds, but no evidence of injury to the cranial bones. He was put to bed, and after a short time ordered to have cold wash applied to the head and face.

6. Has passed a restless night, but is more sensible; had considerable difficulty in voiding his urine; pulse is more full, regular, and 84; surface warmer; respiration natural; tongue slightly furred and moist; anorexia; some thirst; bowels not moved. He complains of pain from the thigh and face, which is more swollen; countenance is flushed, and has some pain in the head.

7. Had a restless night; slept little; had wandering delirium throughout the night, and appears now at times somewhat delirious; pulse is more full, and 100; skin is hot and dry; respiration slow; tongue furred; increased thirst; anorexia; bowels moved; passes urine without difficulty; countenance is more flushed, and he complains of constant pain in the head. There is considerable ecchymosis of the left eye.

Vespere: He has been worse during the day; the delirium has been more severe, and he complains of increased pain in the head; the pulse became quicker and more hard, and there was an increase of pyrexia, with intolerance of light. At four, p.m., he had applied hirudines xvj temporibus.

Emp. lyttæ; pone nuchæ.

R. Mist. antimonialis, ℥xij. ℥j omni tertia horâ sumenda.

8. Was quieter in the night, and apparently asleep at times; but was frequently calling out and delirious; he appears now half conscious, and is delirious, the greater part of the time muttering incoherent sentences; if roused he will occasionally answer rationally; pulse is 116, hard, but compressible; skin hot and dry; tongue furred and moist; more thirst; anorexia; bowels open; passes urine freely. He complains of some pain in the head, but this has been easier since the leeches; pupils are natural size, and act readily; face less swollen; thigh painful and swollen.

Cont. mist. and cold lotion. Enema terebinth. statim.

9. Passed a better night; slept at intervals; was less delirious, and is more rational this morning; he complains of pain in the bruised side of the face, and of some pain in the head; countenance is rather flushed and hot; pupils are natural; pulse is 104, softer and more regular; surface warm and dry; tongue furred; less thirst; bowels open, were freely moved by the enema; passes urine freely; thigh less swollen and less painful.

Cont. cold lotion and mist.

10. Had a tolerable night; was occasionally delirious, but appears rational at present; still complains of the pain in the head; pulse 100, more full and stronger; hot skin; furred tongue; much thirst; bowels freely open. There is less swelling of the face; but it is much flushed and hot; thigh more painful.

Cont. mist., &c.

11. Slept at intervals in the night, but was frequently delirious; he is now more rational, and says he has less pain in the head; countenance is flushed and hot; the swelling of the cheek, eye, and face is less, but the left eye continues much ecchymosed; pupils are natural; no intolerance of light; pulse is 104 and soft; skin cooler; tongue still furred; some thirst; bowels freely open; has slight pain in passing urine. Thigh painful, less swollen. To have hirudines xiv temporibus.

R. Hydrarg. chlorid., gr. j; Pulv. antimon., gr ij. Fiat pulv. Capiat j omni sextâ horâ.

12. He began yesterday afternoon to have pain in the abdomen, which got much worse in the night, and still continues; it is increased by pressure, particularly in the region of the umbilicus; there is no swelling, but the abdomen feels tense; he has some thirst; bowels were freely open, and pain was somewhat easier after this; appetite better; pulse 100, soft and regular; skin cool; passes urine freely, but has some pain in doing so; has some slight cough; has less pain in the head; is free from delirium. The swelling of the face and ecchymosis of the eye are subsiding; thigh easy.

Cont. mist. and pil.

13. Had a better night; the pain in the abdomen is easier; is perfectly rational, and free from pain in the head; pulse 102; less pyrexia; bowels freely open; appetite improving.

Cont. mist. and pil.

14. Continues to improve; has less pain in the face, and the swelling is entirely gone; there is still a little ecchymosis of the eye; bowels regular, free from pain; appetite tolerable; thigh has been easy, swelling has considerably subsided: it was this morning put up with the long splint, extending from the axilla to below the ankle on the outside of the limb.

17. Is daily improving; is free from pain or uneasiness in the head; pulse 98, soft; bowels regular; tongue clean, and appetite good; passes urine freely; thigh has been tolerably easy, and is in good position.

Omit mist. and pil.

21. Is progressing very favourably; is free from pain or pyrexia; tongue clean and moist; appetite good; bowels regular; thigh easy. It was again dressed to day; it is in fair position, and there is some callus around seat of fracture; it was put up again with long splint.

26. Has continued very well until yesterday, when he complained of some pain in the head; this is again subsided; pulse is 95, soft and regular; skin hot; tongue slightly furred, some thirst; appetite tolerable; bowels regular; the thigh is easy, but he has been very rough, and displaced the bandage; it was again adjusted; there is a considerable quantity of callus, and legs appear of equal length.

March 5. Is convalescing gradually; he soon recovered from the slight relapse of the 25th. Thigh is easy, but he is very rough, and displaces bandages.

10. Has continued improving; is free from pain or uneasiness; thigh was again dressed to day; there is a considerable quantity of callus around seat of fracture, which projects much on the outside the limb, and I believe the bones slightly overlap, the leg being somewhat shortened; it was put up with short splints.

17. Continues in good health. Thigh was dressed again; there is some overlapping of the bones, the lower part of the femur resting on the outer side of the upper portion, and giving the limb an arched appearance. It is about one inch shorter than the other leg. He has considerable power

over it, and can bear some weight upon it. It was again put up in short splints, and he was made out-patient, and left the hospital.

REMARKS

At the time this boy was admitted he had symptoms of concussion of the brain, not of a very severe character, but still such as to require careful watching. Injuries of the head, commencing with symptoms of concussion, are sometimes very obscure, the symptoms present being no index of the extent or severity of the injury to the brain or cranial bones, and therefore care should be taken in forming a diagnosis, and our prognosis will be but indefinite in the early part of the case, and ought to be founded only on the future symptoms. This I am convinced of from having seen one or two cases where the injuries were very severe; in one case there was fracture through the base of the skull, and yet the early symptoms were very little more severe than in the present case. The state of the pupil is a very indefinite symptom, as far as I have had an opportunity of observing, in enabling us to distinguish between concussion and compression: but in this case it was contracted, as is usually the case in concussion. The danger of injuries to the head, such as occurred in this case, depends not so much upon the immediate symptoms, as upon what may succeed them. Inflammation of the brain may occur at a very early, or even at a very distant period from the time of the accident, and particularly in young children, where the liability to this is greater than in the adult. In this case, symptoms clearly indicating inflammation of the brain set in, on the second day, such as pain in the head, delirium, quick pulse, some intolerance of light, and pyrexia. After concussion of the brain we should be ever watchful for these symptoms, as indicating the commencement of a rapidly fatal disease, if not checked, and particularly fatal after injuries of the head. The first lot of leeches, with the blister and antimony, relieved the symptoms in some measure but still, although they were not so severe, there remained much delirium, with a quick pulse and pyrexia, symptoms which are very suspicious, as showing that if the brain was not in a state of actual inflammation, it was at least bordering very closely upon it, and it was therefore necessary four days afterwards to repeat the leeches, and to exhibit calomel, which entirely subduedall the head symptoms.

The fracture of the thigh was not put up for nine days after his admission; this is a much longer time than it is well generally to leave similar fractures unput-up, unless there be more injury of the surrounding parts than existed in this case; but it was here thought best not to interfere with it until the phrenitis was subdued; to this circumstance, and to the fact of his being so very restless, it was most probable that the overlapping of the bones, and slight shortening were owing, and not, as some might say, to the kind of splint used, for a more successful plan of treating fractured thighs than with the long splint could not possibly be devised; in fact, if ordinary care be used as to the time and mode of putting them up with this splint, it is very rare indeed that there remains the slightest deformity or shortening of the limb.

REVIEWS.

Lectures on Pulmonary Phthisis, delivered in Jervis Street Hospital: comprehending the Pathology, Diagnosis, and Treatment of the Disease. By JOHN T. EVANS, M.D. Dublin: J. Fannin and Co. 8vo, pp. 196.

In reading the preface to this work, we were somewhat startled by the following novel announcement:—"After all, I have no hesitation in saying that St. John Long was less of a charlatan than many physicians of the present day with an alphabet attached to their names; and if his patients placed unbounded confidence in his skill, the reason was, because he actually performed many extraordinary cures." (p. ix.) Who the physicians are with alphabets to their names, who are less reputable in the ranks of physic than the notorious painter, glazier, and basket-maker, who made his way to preferment by falsehood and fraud, is better known to our author than to ourselves; but we cannot help saying that the discretion is far from judicious which can award praise to the veriest impostor and quack that ever played upon the credulity of the public, or which can place such a pretender for a moment in company with legitimate practitioners of medicine. That he deceived the public into a belief in the virtues of his remedy, is as notorious as that Paracelsus did; and that many cases of bronchitis, which he called consumption, got well under his care, we do not pretend to deny,—nor do we deny that he made a fortune out of the folly of the people—but we must not be weak-minded enough to take popular testimony for our belief in the practical skill of a presumptuous adventurer—or even credit what the juggler said of his remedy, when himself died the victim of the disease which he boasted it could cure.

Our wonderment at the voluntary tribute to the charlatan which Dr. Evans gives in his preface, was explained away by a passage or two which we met with in the body of the work. "In very early life," says the Doctor, "the man who was afterwards so celebrated under the name of St. John Long instructed me in oil painting in my native city. An acquaintance thus sprung up between us, and in some time afterwards, when I went to London, having met him accidentally, we renewed our former intimacy. I now found that he had changed his pursuits, and was engaged in endeavouring to establish his reputation as an empirical curer of consumption. He infected me with his enthusiasm, and, having nothing to do but amuse myself, knowing little if anything of medicine, and not having the most remote idea of ever studying it as a profession, I spent the greater part of my time for some years in assisting him in his daily frictions, and at last became as expert in the operation as himself." (pp. 130, 131.)

Upon this passage we refrain from comment, but we cannot help thinking that if Dr. Evans had reflected upon a certain old adage which speaks of "evil communications," he would have seen the wisdom of forgetting the follies of early life, or at least of not bringing them before the world and the profession as things to be proud of.

From the imaginative style in which certain parts of this book are written, we are afraid our author got a smack of St. John Long's literature, as well as of his painting and medical sagacity. If Charles Phillips had to play the orator upon the march of consumption, he would not beat the following in measured euphony and formal antithesis. "You will see whole families springing up in pride, joy, and hopefulness—beauty in every form and intelligence on every brow. The elder children, full of confidence and gladness, pass the epoch of puberty; they are struck down: others follow in the fatal wake, until some one, or two, perhaps, remain—dejected—timorous—looking for disease in every blast, for death in every shower—and it may be, in a few years, all have passed away, and the parents alone remain, childless, solitary, and heart-broken." (p. 2). If a touch or two from Kirke White had been added as a tail-piece, the picture would have been very pretty indeed.

The following bit of pathos, though laid on with a less liberal brush than its predecessor, is yet much better fitted for a methodist meeting-house than for a work professedly scientific. "The noblest attribute of the science of medicine is that whereby its cultivators are enabled to alleviate human suffering, and to interpose the shield of therapeutics before the threatened dart of death. And if at any time we are enabled to rescue the child of a fond and devoted parent, or the stay of a depending family, from the dark recesses of the lone and silent tomb, appearing in the no distant perspective ready to receive them, we deeply feel at such a moment how utterly insignificant in the comparison are the self-gratulations to which the most brilliant discoveries in the abstract sciences can give rise" (p. 91). To our judgment, it would have been far better, had Dr. Evans occupied half a page by telling us something we did not know. He never can have read Longinus on the Sublime, or he would avoid perpetrating such sins against literary taste.

He tells us that St. John Long knew nothing of pathology, and we are quite ready to believe it, or his pupil would not enunciate such notions as the following:—

"Disease never arises of itself in the living organism; it is always the effect of the influence of external agents" (p. 3.) What would the author make of purulent blood, of tubercle and cancer in the blood, without any organ being affected with the disease? What of scrofulous deposits in the mesentery? What of spontaneous phlebitis?

"It (tubercle) is in fact coagulable lymph." "Many observers have ascertained that lymph can be converted into pus, so that it would appear that tubercle is an intermediate stage in the transformation" (p. 7). Besides the manifest contradiction in these two sentences, we have the novel announcement of many observers having found out that lymph can be converted into pus! Somebody must have been playing a hoax upon the doctor's credulity. We assure him, in all gravity, that no such discovery was ever made by an authority worthy of the least confidence.

"Every case of phthisis pulmonalis commences with bronchitis, active hemoptysis, or pneumonia" (p. 10). "That we deny," as Sterne said of the texts of his sermons. It might be so in St. John Long's practice, but the pathology and practice of our school tell us very different things.

At page 16 we are told of a girl, who, whilst suffering from gastro-enteritis, caught cold, "and very soon after, the fatal *râle* of tuberculisation was heard under the spine of the left scapula." What *the* fatal *râle* of tuberculisation is, we should very much like to know. We know of no sounds that belong to tuberculisation of the lungs, in any of its stages, that are not also manifested in certain other pulmonary affections. If there be any *noise peculiar*, it has hitherto escaped us, and right glad we should be to become acquainted with it.

At page 18 the Doctor says, "Are tubercles in the lungs the cause of phthisis pulmonalis? I think not. When abscess of the lung results from partial pneumonia, we do not look on the pus which it contains as the cause of the disease. Tubercle is only a solid form of pus, and the same reasoning may apply to both these forms of lymphy exudation." This is very funny. In the hands of our ingenious author, tubercle is the most protean-like commodity imaginable. He has before told us that it is lymph, and a something intermediate between lymph and pus, and now he says it is pus solidified! Again, if tubercles in the lungs are not the cause of phthisis *pulmonalis*, we should like to know what is? Predisposition to the formation of tubercular matter, or tubercular diathesis, may be the cause of the *genesis* of tubercle, but if its presence in the lungs be not the cause of the ailment the lungs suffer from in phthisis, then, to our judgment, two and two do not make four.

At page 31, we are informed, "that the existence of tubercles is not signalised by symptoms, nor their absence a cause of amelioration in disease." Does the author then mean to say that if a patient suffer from tubercles in the lungs, and these tubercles become absorbed, he does not get better? And if "the existence of tubercles is not signalised by symptoms," what are we to say of *the* fatal *râle* of tuberculisation?

We are informed at page 114 that Dr. Marshall Hall has shown that an attention to position of the patient in bleeding, will guide as in the amount of blood to be abstracted. We suppose he alludes to the fact of a patient fainting sooner when bled in the upright, than in the horizontal, position, which happened to be the discovery of a no less antiquated personage than Galen!

Amongst the remedies recommended, one is to limit the supply of oxygen to the patient, "by diluting the air he breathes by some innoxious gas;" and amongst other *harmless* things, he advises as "perhaps still better, *carburetted hydrogen*" (p.p. 109, 110).

Did Dr. Evans mean this for a joke, or did he really know no better? Counter-irritation seems to be his great remedy, as it was with the immortal

chest; and himself has often, he says, obtained the best effects from the extensive and regular application of a contra-stimulant, *that had been previously employed in other hands*, for a length of

time without the slightest benefit" (p. 189). This would almost incline one to believe that the Doctor, like the Saint, has got something of a magical touch about him, and that it is not so much to the material used, as to the man who uses it, that the cure of consumption is chiefly due. Errors like those we have pointed out, abound throughout the work, which, however, in certain places, evinces a considerable amount of natural shrewdness and tact. Dr. Evans is clearly not wanting in ability, but he obviously wants more experience in practice, and a better acquaintance with physiology, pathology, and therapeutics, before he can undertake medical authorship with success.

TO CORRESPONDENTS.

Mr. Edwin Lee's paper on Mr. Liston's recent communication to the Royal Medical and Chirurgical Society shall appear in our next.

H. H. *is undoubtedly open to prosecution; being, however, a surgeon, it is improbable that he will be selected in preference to persons in practice without either a medical or surgical qualification.*

X. Y.—*The stramonium cigars are no novelty.*

G. G. *should take his question with a guinea to a medical man. We have no faith in the virtue of gratuitous opinions.*

F. B.—*We shall be happy to publish the case illustrated by our engraver. We shall require drawings as perfect as possible.*

Homœopathy.—*We are very ready to publish Dr. A. Combe's opinion on this subject on the first favourable opportunity. At present space is wanting.*

E. A. T.—*Received.*

X. Y. Z.—*It depends on the way in which it is contracted.*

Mr. John Staples Keddell, of Sheerness, *has favoured us with a letter containing his experience of the conduct of the Poor-Law Commissioners towards medical practitioners. Mr. Keddell has been fortunate in his connection with union practice, and we regret that our space will not permit us at present to make the results of his experience generally known. Mr Keddell's letter is written as an answer to the remarks of Mr. Daniell, contained in our last week's report of the proceedings of the National Association.*

Mr. Mann *is thanked for his communication. Such advertisements are unfortunately very common.*

W. K.—*We are obliged to our correspondent for his criticism, which is just.*

The correspondence between Dr. Handyside and Dr. Mercer is too long proportionately to its importance for our pages. Dr. Handyside being a candidate for the university chair, now filled by Mr. Goodsir, was charged by Dr. Mercer with a breach of a promise of honour, Dr. Mercer having bought an anatomical school of Dr. Handyside on a positive understanding that the latter was never to re-engage in anatomical teaching in Edinburgh. Dr. Handyside denies that there was any such agreement, and Dr. Mercer has no authority for his own impeached veracity but a gentleman who, unfortunately, lives a long way abroad.

Medicus, A Constant Reader, M. D., *and others on the necessity of joining the New Institute shall have early consideration.*

A number of papers have been received, the names of whose authors we do not mention from our fear that we cannot find space for the majority of the communications.

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THE MEDICAL TIMES.

SATURDAY, MAY 2, 1846.

> In this impartial glass my muse intends
> Fair to expose myself, my foe, my friends;
> Publish the present age; but where my text?
> Is vice too high, reserve it for the next.—POPE.

THE plan suggested by the Committee of the National Association for the re-organisation of the Profession is of so obviously wise and comprehensive a character, that opposition is disarmed. It carries with it the fascination of an Eastern enchanter. Before it the snake has sheathed his sting, and the ass forgotten his bray. Malice sits weeping over her blighted schemes, and Envy gnaws her heart in secret. Discomfited and rebuked, an unwilling assent is wrung from the adversary, and the calumniator confesses his guilt in silence. The juncture is happy. Let all good men unite, and the disinterested labourers in our cause will speedily ensure as great a triumph for the Profession as they have recently achieved for themselves.

We have been, for some years now, engaged in the cause of medico-political improvement; we have seen associated men of all characters and grades of ability; we have become versed in the tactics and discipline of agitation, and familiar with all the subtle intrigues and striking evolutions which often surprise the beholder of the melodrama of public life; and we have come to this deliberate and unchangeable conclusion—that the clamorous champion of public virtue—the unblushing reviler of private honour—the glib professor of personal integrity is, usually, of all men the most sinister, corrupt, and selfish in his heart. It is an old adage, "when a man flatters you, look to your pockets," and it was an expression of the celebrated Dr. Johnson that "patriotism was the last refuge of a scoundrel." Let us beware, then, how we receive congratulations from an enemy, and when an individual suddenly turns patriotic, we must not the less remember that, beaten at all points, he has had recourse to the last refuge of baseness.

While we are thus, on the one hand, performing a cautionary duty, we invite, on the other, the support of every conscientious and liberal man to the proposition of the National Association. During our career we have had frequent opportunities of witnessing the noble ardour and high sense of integrity which animate the Medical Profession of this country; and in now calling upon them to rally round the standard of the Association, we are confident that our cry will meet with a cheerful response. At the late great meeting the announcement of the Committee was received with enthusiasm, and throughout the length and breadth of the land an interest in the labours of the Committee has been awakened, which augurs most favourably for the issue of their great undertaking. We hope we shall speedily find that public meetings, not only of the local associations, but of other members of the Profession, have been held wherever two or three practitioners could arrange a meeting, and that resolutions have been passed to assist, by every means, the accomplishment of the noble enterprise in which the fortunes of the General Practitioners are embarked.

Let no unworthy jealousies mar this movement—let nothing derogatory to our professional character prevent that cordial co-operation which is necessary to conduct our cause to a successful result. Tardiness, lukewarmness, doubt, is now suicidal. Let no malicious insinuations—no equivocal approbation—no cold suggestions—drop into the ear, and chill the hour of action. If each member of the Association will make it his business to obtain only two, or even one more signature, in support of this great cause, the whole Profession will be banded together in one body, and exhibit a moral power that nothing can resist, and that will make success in any legitimate undertaking of the Association unconditional and absolute.

If ever union was necessary, it is necessary now—when success must entirely depend on *voluntary* exertions. Let us not, however, be understood to indulge in that maudlin liberality—that sophistical simulation of candour—that fatal folly of inviting and sanctioning an union of men with a disunion on principle. Such a thing is an impossibility—contrary to experience and common sense—and can end only in ruin. The man who advocates it must be either a fool or a knave—a fool to pin his faith on an absurdity—or a knave to promote his self-aggrandisement by the jealousies, and dissensions that must necessarily result. We know that the hand of fellowship has been professedly proffered on these terms; but we trust that the enlightened intelligence of the Profession will scorn to accept it. There must be a creed to believe in—a banner to fight under: the National Association have unfurled their flag, inscribed with a National Institute; and we trust that all our readers will see the propriety of immediately buckling on their armour and aiding the committee to carry on the warfare. UNITE, UNITE, is indeed the motto; but unite for the accomplishment of a principle, and for nothing else!

Our attention has been directed to a meeting of a few individuals at the Freemason's Tavern, who have constituted themselves at one and the same time a *deputation a committee, and an association! and have appointed in their own persons, presidents, chairman, secretaries, and all the functionaries thereunto appertaining!*

These individuals are, in truth, the Tooley-street tailors of the Profession, the *disjecta membra* of various pre-existing effete bodies, having no principle of association, no bond of union, no assimilating qualities, no common feeling; no common party, and no influence or cause for it, personal or private. Perhaps we have carried the negative statement too far; there may be *one* principle of association, *one* common feeling: but the subject is too ungracious for us to dwell upon. Even now we should not have noticed them, if the Committee of the National Association, with that condescending generosity that has ever marked their career, had not stooped to receive a deputation from this body—the *deputation* being the *deputing* body itself—and had not thus brought their political spumescence for a moment on the surface of the stream.

We hear, however, that in *their two large* PUBLIC *meetings* (of nine and thirteen individuals, respectively) faction has ventured to breathe enmity, though it has not yet dared to speak defiance. They have not, in fact (extremely violent and quarrelsome though they be), a ground of complaint against those gentlemen, to overawe whom they hold their *imposing* nocturnal assemblies. Professing concord and union, they are seeking for the unguarded moment when they shall be able to plunge their weapon deeply into the side of their adversary.

We beg of them to reconsider their position; if they persist in their equivocal, nay, *dishonest*, career, we have a duty which, as journalists and guardians of professional welfare, we shall not hesitate to perform. We know that a few strokes

of our pen would blot out the names of the whole of these gentlemen from the roll of public characters. We refrain: and we only keep our hand raised to give them time for penitence and retreat. Their doings are not unobserved, and whatever their resolutions may express, it is desirable that far more liberality of sentiment should govern their proceedings. If this does not happen, then the press must interfere—

> "A chiel's amang ye takin' notes,
> And faith he'll prent 'em.

Rejecting this unattractive subject, we once more call upon our professional brethren to strengthen the hands of the committee of the National Association. A glorious destiny is before them; and if they now stand listlessly by while the tide of fortune is rising to its flood—for them at least—it may never rise again.

> Despicere unde queas alios, passimque videre
> Errare, atque viam palantes quærere vitæ.
> LUCRETIUS.
>
> ——— Monstrum nulla virtute redemptum
> A vitiis. JUVENAL.

IF we give Hesiod credit for telling the truth, then are we to believe that all the ills that infest us poor mortals are due to that infatuated fellow Prometheus, who was silly enough to open Pandora's box to see what treasure was contained in it. The only treasure it had lay, like treasures in general, deep enough not to be got at, except at a sacrifice hardly worth the making. All over and round about it, nestled, in concentrated snugness, masses of mischief, which bustled themselves into business the very moment they saw daylight—what business they had to do any such thing it does not become us to inquire. Out they came, so says the poet, and began right earnestly to clap their wings, and wag their tails, in an ecstacy of *diablerie*. That they have flown, and fluttered, and dropped their venom, ever since, is well enough known to every poor sinner who has felt the effects of an introduction to this nether earth. Why such things were called into existence, and commissioned to visit us, is an ultimate subtlety that even the brains of Thomas Aquinas could not compass—all we know is, they are here, and precious nuisances we call them. The best proof we can have that nothing was ever created in vain, is in the fact that these said nuisances are not without their claims upon one's gratitude. The proverb says, "It is an ill wind that blows nobody any good"—and so we should think it would be for we have the notion that no hurricane, whirlwind, sirocco, or any such like, ever yet blew without bringing some benefit or other with it; and, therefore, we are prepared to submit that disease, not the least serious of the sins against one's comfort that Pandora had the keeping of, may be a messenger of health to the particular somebodys who make a living by it. Strange enough is it, that the sins and sufferings of one portion of mankind should be so many perquisites to another. Were our *morale* what it ought to be, then would parsons be at a discount, and a precious influx their "turn out" would make into the humbler ranks of society. Were our materiality unblemished and everlasting, doctors would have nothing to do, except like their physic, to go "to the dogs." Sins and sorrows, then, have a good deal to do with the maintenance of a very significant portion of mankind. As for ourselves, doctors we mean, we are so complete a paradox that, *in vita in morte*, should be the motto of our tribe. The antiquated puzzle of one seed dying that another might live, is typified in our case every day. Somebody says, somewhere or other—

> 'Tis nature's law: wave urges wave:
> The coffin'd grandsire seeks the grave,
> The babe that feeds by suction,
> Finds with his ancestor repose:
> Life ebbs, and dissolution sows
> The seeds of reproduction.

So it is with physic—it feeds upon the material that dies and decays before it. It is a singular fact, but perfectly true, and no doubt perfectly right, or there would be no foundation for the philosophical doctrine of sympathy and antipathy.

The physic we allude to, of course, is legitimate, but it is unhappily permitted to be corrupted, and almost as commonly as tares are permitted to thrive amongst wheat. The very distribution of the one furnishes occasion for the dissemination of the other. Good and evil are as constant to one another as the ebb to the flowing of the tide. It would almost seem that, if not in some sort companions, either would be a non-natural. There is no chance, we fear, of having any such monstrosity in physic, for as sure as any in the regular *corps* may pursue a line of lucrative and honourable practice, so surely will one of the un-drilled follow in his wake, and at last out-distance him in the great race of recompense. Assuredly amongst us, the running is not to the swift, nor the fighting to the powerful, for cunning and craftiness have it all their own way; and it were as easy to tie a knot in a sun-beam as for a worthy practitioner to make as short a cut into popularity as a worthless one!

To take a case in point. Blondel, in 1665 brought into notice, or rather, practically revived, the use of arsenic, externally, in cancer. He made no secret of it, but stated openly how the arsenic was prepared, and in what quantity, and in what manner, it should be applied. All this was contained in his book, "De Cura Carcinomatis absque Ferro et Igne." Half the people were afraid of the remedy when they learnt what it was, and, for precisely the same reason, the other half did not think it worth any notice at all. Poor Blondel had the *rare* merit of being honest, and he met with the *common reward*, in such cases, of indifference and distrust. Since his time, a host of charlatans have practised upon public credulity with his very means, and have had their pockets well filled for their presumption. "Cancer curable without cutting" is an advertisement that has paid as well, and been as well paid for, as consumption curable; and yet, in the majority of cases, the despised remedy of Blundel has been the free trap to catch flats with. Both sexes have made it available to their interests, and, actually, an old woman, too antiquated and imbecile for anything but quackery, made it fill her own purse, and furnish a generous settlement upon her children! Sydenham once said, but whether in earnest or in irony we are not informed, when asked by a student what books he should read;—"Oh! why, read Don Quixote, it is a capital book, and one I consult very often." We have our doubts whether Sydenham ever said any such thing; for we suspect his memory to be as much traduced by medical *bon mots*, as is Sheridan's by those of jollity and *belles lettres*; but the fact being admitted, it has furnished proof enough that, "monkeys mostly out-ape us, commit what absurdity we will." If Sydenham said what is imputed to him, he did it out of that contempt for presumptuous authorities, which any one of his genius and judgment might unhesitatingly entertain. With Sydenham, as with Shakspere, "none but himself could be his parallel;" but plenty since his time have seized upon his license, and taken abominable liberties with it. A common trick amongst men who know nothing of medical practice is to deride it altogether, and affirm, that patients will get well as readily without physic as with it. This is a threadbare sort of cloak to cover ignorance with; but yet, there is many an impostor who, now-a-days, covers himself with the unseemly garment, and finds himself comfortable in it. We have met with many such, and have enjoyed their affected scepticism right heartily. Another class, utterly unread in the profession, and, of course, in happy ignorance of the *status* that it had, or that it has, pretend, like the empirics of old, to care nothing for authorities, but rely wholly upon experience. They despise books, because they have got none; and the information contained in them, because they have never been guilty of gathering it; and thus, floundering away in the mud of their making, they affect to be wiser than their neighbours, by virtue of reading only, what they call "the great volume of nature." Were it possible for such commodities ever to arrive, single-handed, at anything like tolerable medical knowledge, we might be tempted to inquire, how many lives had to be forfeited ere they were fit to be called practitioners? Many must be the victims sacrificed at such a shrine, ere it could b considered worthy. Pretenders of this class are unhappily, numerous, even now, in the face of the light of science; luckily, however, the darkness they create is fast being dissipated, and though themselves may not be banished from our brightening region, at least we have the consolation of being able to recognise their presence in the shadow that pervades it.

Sydenham had a particular mode of practice in a disease which has long been the opprobrium of our profession, and which has furnished as much food for quackery to feed upon as any other ailment known in the great mart of physic—viz., GOUT. Up to the time of our English Hippocrates, the chief remedies in this "terrible trouble," were, the cold water of Kinglake (hydropathists fancy they are novel in their absurdity), the *eau medicinale* of the French, and "patience and flannel," the veritable commodity of fools of all sorts. Against these farragos Sydenham invectively set his face, and struck out a middle line of treatment, compounded of "gently stimulant," "antiscorbutic," and "purifying" medicines. His practice was very successful, though himself fell a victim to the disease for which he had prescribed, and upon which he had written so lavishly; but no sooner was he "quietly inurned," than, with the celerity of a trick in a pantomime, did his triune mode of practice resolve itself into its elements, and from each sprung a systematic, substantial quack, who boasted himself to be the successor, in all potency, of the illustrious Sydenham! Pandora's box was certainly very bad, but it could scarcely have been worse than this, had it had only one mischief to meddle with. "This was Sydenham's practice," said the angelica-root man. "No, this was his plan," said the fellow with the wormwood; "nonsense," said the vendor of comfrey and chamomile, "mine is the recipe that will relieve you in a twinkling." It will scarcely be credited, that, within a quarter of a century of the death of Sydenham, three large fortunes were made, out of the credulity of the English people, by idle adventurers, who seized upon his particular tenets to make separate merchandise of! Gout cured this way, and gout cured that, and gout cured the other, were so many highways to wealth, assailed by three rascals who "ran a muck" upon the credulity of the people, and found themselves finally rewarded for the experiment

they had risked. Even to this day, Sydenhamites are to be found, practising some particular branch which its originator would have rejected singly, whilst the "patience and flannel" men come in cloaked in the absurdities of yore, and as effectually concealed from common scrutiny as were the primitive craftsmen of their calling.

The catalogue we have given of ancient quackery is merely a compendium of what we had once designed to give. The scale is a mighty one, and we have been compelled to pass over certain periods of time whose history would have given us ample materials for reflection. Instead of treating specifically upon the quackery of the ancients, we have chosen rather to treat of that part of it which bears a relation to the idle empiricism of the present day. We have taken the more prominent cases, because they are best deserving of our notice; but, did our time permit, we could go over the whole range of modern quackery, and prove, not only that no part of it is novel, but that its absurdity was proven to demonstration long before the people of this planet had attained to the wisdom they now profess to have.

TRANSACTIONS OF LEARNED SOCIETIES.

PATHOLOGICAL SOCIETY OF DUBLIN.

Meeting of March 7th, 1846

Dr. Green in the Chair

Dr. Law said the pathological specimen he had this day to exhibit had been taken from the body of a young woman, who was admitted to Sir P. Dunn's Hospital on the 27th of February, and died in four days after. Only a very imperfect history of the case could be obtained, for the patient's mind was wandering on her admission, and besides, she was brought to the hospital by a man who did not know much about her, but from all that could be gathered, it appeared that her illness was of eight days standing, and had commenced with shivering, consequent on exposure to cold. A severe attack now followed, the symptoms when she came under observation being as follow —Her mind in so unsettled a condition, that, as he had just observed, it was impossible to get any detailed account of her illness; she was not long in hospital, however, when diarrhœa set in, together with involuntary discharges. The pulse was extremely rapid, amounting to 140, and presenting the character to which the term dicrotous is applied; the heart's action was also extremely feeble, and the countenance had a leaden dusky hue The abdomen was not tympanitic, or at least very slightly so, and was not painful on pressure. There was no gargouillement over the ilio-cæcal region, nor were there any of the spots which are usually sought for in cases of typhus fever accompanied with diarrhœa. For the four days she was in hospital previous to her death, she was gradually sinking, and though Dr. Law did not at all expect her to recover, yet he calculated on the case being a protracted one, and was rather surprised at finding her dead on the 30th, on which day she was seized with a sudden attack of dyspnœa; a considerable quantity of blood frothed from her mouth and nose, and in an hour after she was dead.

On examining the chest, in order to find some clue to an explanation of the cause of death, the substance of the lungs was found infiltrated with blood, constituting a very unequivocal specimen of pulmonary apoplexy. Dr. Law had never seen, he said, nor was he aware of any case having been recorded, in which both lungs were engorged as in this case; one, however, being much more infiltrated than the other. The heart was next examined, having in view the fact of the frequent coexistence of cardiac disease with pulmonary apoplexy, but no trace of disease was discoverable in that organ. The mitral valve was in a perfectly healthy state, and here he would direct the attention of the Society to the remarkably strong and firm condition of the muscular substance of the heart in this case. The intestines next came to be examined, and in them Dr. Law observed there was particularly well marked that species of lesion usually associated with a particular type of fever. The stomach was first cut into, and the small intestines opened from it, and the examination of these had proceeded a considerable way before any unusual appearances were met with, but after a time there were first observed the patches which he now pointed out; masses of glands very much in relief constituting a sort of elliptical arrangement, whose long axis corresponded with the length of intestine, and only appearing more in relief than natural; but as the examination proceeded along the tube these glandular masses became still more prominent, so much so, Dr. Law observed, as to resemble closely the prominences of condylomata; there was yet, however, no destruction of the mucous membrane The patches varied in size, some being of a circular, others of an oblong shape, and presenting in some places the elevated edges and depressed centres of the small-pox pustule; still advancing, we come to patches in a state of ulceration, presenting elevated margins and jagged and broken down surfaces, having some of the matter of the intestine entangled with them. The nearer the termination of the ilium was approached, the more numerous and large did these ulcerated spots become; their surfaces appeared to be made up principally of cellular tissue in a state of mortification and slough. In passing from the termination of the ilium to the large intestines, these diseased appearances seemed to cease almost altogether. On the cœcal aspect of the ilio-cœcal valve there were slight traces of disease, but in the large intestine itself scarcely any at all, there being occasionally only discoloured patches to be met with. The state of the mesenteric glands, Dr. Law observed, was also worthy of attention—in the immediate proximity of the ulcerated patches those glands presented an exceedingly enlarged and reddish appearance. Dr. Law was glad, he said, to have an opportunity of showing to the Society the present specimen, one similar to which he had not seen for some years; it was interesting besides, he considered, illustrating, as it did, so very well those pathological conditions which have attracted so much attention, and respecting which so great a difference of opinion exists.

The continental physicians, viewing this lesion in the light of the cause of fever, wished to expunge the term typhoid fever, and to substitute for it gastro-enteritis, &c. But in this country, although this lesion has been often observed, yet many other lesions have equally presented themselves, and in all the fever exhibited, a certain degree of uniformity, diversified only by the local lesions, which seldom were observed very early in the fever, at least until it existed for some time. He had never known he said, a similar amount of disease detected after so short an illness, as had occurred in this woman, who died on the eleventh day of the attack. It has been stated by Louis, Dr. Law remarked, that he had always known this species of lesion to be accompanied with considerable tympanitis, diarrhœa, and gargouillement, over the ilio-cœcal region, together with red spots on the surface of the abdomen; but in the present case all these symptoms, except the diarrhœa, were absent.

Mr. Hamilton exhibited a preparation taken from the body of a person who had passed fæces from the bladder.

He was attended by Dr. Nulty, and had been seen at different times in consultation by Sir Philip Crampton, Sir H. Marsh, and Mr Hamilton.

The patient was sixty-three years of age, not emaciated, but presenting the peculiar pulse and sallow aspect that persons affected with cancerous disease often have. When Mr. Hamilton first saw him, in June last, he complained of pain and frequent desire to pass water, and, on examining the latter, yellow feculent matter was seen at the bottom of the vessel, and shreds of the same material floating about in the urine. He had been ill for some time, but had only a few days before felt a sense of uneasiness and weight referred to the bladder, soon after which the urine deposited a thin puriform matter, and then followed the feculent discharges from the urethra. The symptoms suggested the supposition of an abscess in the prostate having opened into the bladder, and then into the rectum, establishing a passage between them; but on examination nothing morbid was discovered in the prostate, which, though rather hard and enlarged, was not more so than is usual at his time of life; besides, no urine was observed to come by the rectum. Sir P. Crampton and Mr. Hamilton then formed an opinion that some malignant disease existed, causing a communication between the bladder and rectum, but they did not venture on a more specific diagnosis. Mr. Hamilton washed out the bladder with a little tepid water; but this was followed by so smart a hemorrhage that it was not repeated. The passage of fæces from the bladder continued for a considerable period, attended occasionally with a good deal of uneasiness, but at other times the urine became pretty clear. The patient experienced much relief from injections of tepid water into the rectum.

Last summer he was attacked with apoplexy, the state of coma lasting several days, and attended with some fever; he got completely over this, but the feculent discharge from the urethra continued. He next became affected with cough, and latterly with severe fits of dyspnœa, and the pulse was feeble and very *irregular*. Three days ago he was seized with a second fit like that which had occurred in the summer, and Mr. Hamilton went with Dr. Nulty to see him; but he was just dead when they arrived.

The autopsy very satisfactorily accounted for the feculent discharge from the bladder during life. Corresponding to the termination of the sigmoid flexure of the colon, and commencement of the rectum, there was a scirrheus contraction, formed by the deposition into the sub-mucous cellular tissue of a layer of hard scirrhous substance, of a bluish-grey colour, crossed by a stratiform arrangement of fibres at right angles to the bowel, about an inch or more in thickness at the seat of the stricture, and gradually getting thinner. It appeared a beautiful specimen of the disease so well delineated by Carswell and Cruveilhier, and so often seen in the sub-mucous cellular tissue of the pylorus. The contraction was so great in one part as with difficulty to admit the little finger, and about a quarter of an inch above this the mucous membrane formed a projection, constituting a kind of valve, above which the fæces lodging had caused ulceration, with inflammation of all the tissues of the bowels, and adhesion between the serous portion of the rectum and bladdder An abscess had formed, which, working its way down, had opened into the bladder at its back part, explaining the passage of pus which first took place. The opening between the bowel above the stricture, and the bladder, was not direct, but a long sinuous passage two or three inches in extent, and so narrow that, though the bladder contained much fæces, it was not without difficulty that the opening into it was discovered. The long narrow valvular nature of the communication also explained the fact that no urine was observed to pass by the rectum, as the effect of the distension of the bladder would be, as in the case of the uterus, to close the opening, and prevent the passage of fluid through it. The mucous membrane of the bladder was very little redder than natural. Near the opening from the bowel was another blind one, leading for a short distance between the two cavities. One very remarkable feature in the case was, that during the whole illness, from June to March, the patient never had a symptom of obstruction of the rectum—a circumstance which Mr. Hamilton thought might be explained first by the narrowing still having space enough for the passage of a certain bulk of fæcal matter, but chiefly to the fact of the bladder having acted as an evacuant of the contents of the bowel, thereby lessening the pressure of a mass of impacted fæces on the stricture, and the consequent irritation. The lungs were slightly emphysematous and congested, and there was some hydrothorax. The liver was larger than natural, but not apparently changed in structure. The left ventricle was hypertrophied and dilated; the right ventricle not dilated, but more fatty than usual; there was no valvular disease.

Dr. Lees presented to the Society a specimen taken from a man who died at the Meath Hospital during the foregoing week; he considered it pe-

culiarly interesting from the combinations of disease that were found to consist in the case. The subject was a butler, aged sixty-five, who was admitted to the hospital labouring under jaundice, and at this time appeared in an almost moribund condition, so much so that Dr. Lees was requested by his friends to see him as soon as possible. He was universally jaundiced of a yellowish green hue, and complained of pain in the right hypochondriac and epigastric regions, in which locality a tumour, or rather a general enlargement, was observed, slightly tender to the touch, and extending as low as the umbilicus; vomiting and hiccup were present, and the bowels constipated; there was no ascites, nor pain in the shoulder; the history of the case was on the whole rather obscure. He stated that he had not been addicted to drinking, but complained for the last twelve months of a bad stomach, and only for the last three weeks felt pain, since when he had been jaundiced. From the peculiar green colour of the latter, the great emaciation, the age and general appearance of the patient, it struck Dr. Lees that malignant disease existed, and that the liver was the seat of it; but, on further examination, doubts arose on this point, as the signs and symptoms might be accounted for by a chronic duodenitis with enlargement of the liver. All the bearings of the case being considered, however, it was concluded that palliatives were the only means adapted to it; and, by the use of effervescing draughts, and small doses of the ext. taraxici, the vomiting was allayed, but the man gradually sunk.

Some very interesting facts were disclosed by the dissection. On opening the abdomen, the gall-bladder was seen enormously distended, so much so as to extend down into the right lumbar region, occupying the position of the right kidney. Proceeding further, the stomach was also observed to be very much enlarged; passing down to a level with, or even below, the umbilicus. The liver was also greatly increased in size, and pushed forward, not from any morbid deposition, but from general hypertrophy of its substance. A remarkably good specimen of scirrhus of the pancreas was next discovered, the concave portion of the duodenum being filled up by a large encephaloid mass, and the mucous lining of this portion of the intestine destroyed, the diseased head of the pancreas formed the base of the intestine. The entrance of the common duct was permeable, but the duct itself was distended to such a degree as to have appeared, at first sight, like a portion of small intestine; it was, in fact, Dr. Lees remarked, much thicker than the adult thumb. The diseased condition of the pancreas, Dr. Lees observed, was extremely interesting; during the ten days the patient lived in the hospital, no appearance of salivation manifested itself; this was a point he considered worthy of observation, inasmuch as the occurrence of profuse salivation had been laid down as characteristic of disease of this organ; the man did not complain of ever having suffered anything of the kind.

Another lesion, Dr. Lees remarked, yet remained to be noticed; the stomach, as he had observed, was greatly distended, and was found to contain a fluid of peculiar character, which had been examined by Mr. More, the chemist; but neither by the microscope nor by chemical analysis was he able to detect the slightest trace either of blood or of bile in it. A very interesting specimen of the chronic ulcer of the stomach was also discovered in the usual situation between the lesser curvature and pylorus; it was an exceedingly well marked, deep, excavated ulcer, single as regarded its size, but in the immediate neighbourhood were one or two superficial ulcers in the early stage. The edges of the large ulcer were thin, and formed by the prominent mucous membrane, the base by the vascular coat.

The case, Dr. Lees thought, was possessed of many interesting features, fully sufficient to warrant him in bringing it under the notice of the Society. The man, as he had before observed, though labouring under those manifold lesions, yet, when he came under observation, complained of little or nothing, more than mere debility. A question might arise as to whether the disease of the stomach was of the same character as that of the duodenum and pancreas; but it was quite clear, he thought, that there was no ground whatever for entertaining such an opinion, for the ulcers possessed all the characters of the simple chronic ulcer of the stomach There was deposited in the liver one of Far's tubercles, analogous to the disease of the pancreas and duodenum, and probably secondary to the disease in these parts. Had the man lived long enough, masses of the same malignant growth would, no doubt, have been scattered through various parts of the body, and the ulceration of the stomach would also, it may be supposed, have gone on to perforation, as occurred in two or three cases brought forward at the Society last year, and in which, as so generally happens in such cases, the symptoms were so obscure that little or no pain was complained of until the severe pain which ushered in the violent and acute attack of peritonitis which caused death.

Dr. Hutton exhibited to the Society a specimen of diseased brain, the subject of which was a young woman of phlegmatic and unhealthy appearance, who came to the Richmond Hospital for the purpose of being operated on for entropion of the eyelids, which had produced opacity of the cornea. She was admitted three days previously, having made no mention of any other complaint. While Dr. Hutton was going through the ward yesterday, this patient was suddenly seized with a fit; she became insensible; the breathing slow and laboured, inspiration being attended with stertor and expiration with moaning. The muscles were rigid and the extremities fixed, but there was no convulsive motion of the limbs; the face was swollen and suffused; the pupils fixed and dilated; the pulse was weak, and the surface rather cold; she had vomited a short time previous to the fit. From this she gradually recovered, and spoke rationally to those around her; but she was seized soon afterwards with a second, and again with a third, attack, in which she died.

Dr. Hutton was informed by a patient in the same ward, that the deceased had said she was subject to fits, and it appeared that she had for two days previously, occasionally vomited her food and drink, and had felt pain in her head, of which, however, she had not complained to Dr. Hutton or the resident pupil.

At the post-mortem examination, on proceeding to examine the brain, it was observed that when the cranium was opened the dura mater had a remarkably dry appearance, and on raising this membrane the brain started up as if it had previously been much compressed; its vessels were not congested; there was no opacity of the arachnoid membrane, nor any sub-arachnoid effusion, the sulci between the cerebral convolutions not being less deep than usual; the lateral ventricles contained three or four ounces of serum, and seemed considerably dilated. In other respects the cerebrum was of a healthy appearance and consistence, but in the left lobe of the cerebellum was found a cavity or cyst containing about an ounce of serum, lined with a smooth membrane, and not communicating with the fourth ventricle. In the substance of the cerebellum, and projecting into the cavity described, was a tubercle which exactly resembled the encephaloid, flesh-coloured tumours of the brain, which he (Dr. Hutton) had exhibited on a former occasion to the Society. He remarked that in the present case the disease of the cerebellum had probably been of some duration, and it was worthy of observation that, previous to the last fatal attack, this patient had not only manifested no impairment of sensation or intellect, but the locomotive powers which are said to be regulated by the cerebellum were duly exercised, and indicated no defect, notwithstanding the imperfect and morbid condition of so large a portion of the cerebellum. Although there was a considerable quantity of adipose matter throughout the body the mammæ were as little developed as in a male subject, the uterus was of small size, the ovaries, &c., natural, and the function of menstruation had been regular.

The cause of death seemed to be the sudden effusion of serum into the ventricles—a true serous apoplexy, or water stroke, unattended with congestion of the vessels of the brain, extravasation of blood, effusion of lymph, or any other sign of inflammation.

The cavities of the chest and abdomen presented no morbid appearances.

MISCELLANEOUS CORRESPONDENCE.

THE *SHAM ASSOCIATION* OF "*ASSOCIATED* SURGEONS."

[To the Editor of the Medical Times.]

SIR,—In the short notice you deigned on my letter on the above subject, you made the mistake of treating the meeting with contempt because, though called by public advertisement, only "*thirty*" persons were present. You made here a serious mistake. The number present, instead of being "thirty," was—THIRTEEN! You mistook my writing. * * *

M.D., A SUBSCRIBER.

[Our correspondent, who is rather wordy, quotes a showy advertisement, in large—extra large—print, in the columns of the Lancet (weekly periodical), which made known—we beg pardon, which advertised—still more unfortunate—which was *intended* to make known and advertise—the fact that such an important public meeting was to be held. Mr. Wakley was to be present. He was present; so was Mr. Hodson Rugg, and ELEVEN other gentlemen! But we have said enough.]—ED.

KING'S COLLEGE.

MEDICAL DEPARTMENT.

The annual meeting of this department of the College for the distribution of prizes, and certificates of honour, to the successful students, was held in the theatre, on Saturday. There were present on the occasion the Lord Bishop of London, the Lord Bishop of Lichfield, Sir Robert Harry Inglis Bart.; the Rev. Doctor Sheppard, Joshua Watson, Esq., Doctor Jelf (principal), Doctor Todd (the dean), and the several professors of the department, in addition to a large assemblage of ladies and gentlemen relatives and friends of the pupils, who took an interest in the proceedings of the day. In the absence of his Grace the Lord Archbishop of Canterbury, who was unable to attend through indisposition, the chair was occupied by

The Bishop of London, who said, that having hitherto been accustomed to see the Archbishop of Canterbury presiding at their annual meetings, his absence on that occasion must of course be a subject of regret to them all, more particularly when they were aware that he was kept away by indisposition. They were all aware of the object for which they were there assembled, and as it would be fully entered into in the report that would be made to the meeting by the Dean, he would not detain them longer than to express his satisfaction at the advancement the King's College had made, and the character which the students had acquired, which he attributed not only to the superior education which they were receiving in science, but to the sound principles of Christianity in which they were trained. At the request of his Lordship

The Dean of the Medical Department then rose and said—My Lord, it is my duty to inform you that this is the fifteenth distribution of prizes in this department of the college and it is almost needless for me to add how much this ceremony is solemnised by your Lordship's presidency, or how greatly the value of these prizes, which my young friends will this day receive, is enhanced by their being received from your Lordship's hands. The report, which it is my duty to make to your Lordship, embraces the following topics:—

"The number of students attending the medical classes, their conduct during the past session, the general state of the medical department of the college and of the hospital, together with a statement of such events or changes, affecting our government of the college, as may have occurred during the past year.

"The number of the students attending the medical classes exceeds that of any previous occasion.

"Those who have been matriculated and take their entire medical education at the college are 192 in number, of whom 183 are in actual attendance.

"The occasional students who attend only one

or more courses are 22, making a total of 211, of which number 160 attend the hospital.

"It will be interesting to your Lordship to know that each succeeding year we find, in the medical department of the college, a greater number of students who have previously enjoyed the advantages of one or more of the other departments of the college. Many have been brought up in the school, and not a few have attended the course of instruction in the department of literature and science. We have more than one associate of the department of general literature pursuing medical studies. One of the junior scholars, whom I shall have to present to your Lordship to-day, has passed through a career of distinction in the department of general literature; and the gentleman who has obtained the Medical Society's prize is now a distinguished student of the same department.

"We are thus enabled to see the mutual bearing of the various departments of this great college, which now numbers very nearly one thousand pupils receiving instruction within its walls, one upon the other. The school supplying the senior departments, and the department of general literature and science sending forth its pupils into the various callings of life.

"It is extremely gratifying to me to be able to report to your Lordship most favourably of the conduct and diligence of the medical students. It is but rarely that I have been called upon to take any notice of misconduct or neglect of duty, and I am happy to add that, when I have interfered my remonstrances have been received in a proper and becoming manner.

"The general condition of the college, and its appliances and means of instruction, exhibit a progressive improvement. Under the direction of our new curator, Mr. Masters, the museums are being put into a more efficient condition, especially as regards the zoological collection, which had hitherto been much neglected.

"Valuable additions have been made to the departments of mineralogy and geology by Major Cautley and Professor Jones, the former of whom has presented his Indian collection.

"The botanical museum has been enriched by valuable presentations from Mrs. D'Oyly and Professor Royle, to the former of whom we are indebted for a nearly complete series of British plants, contained in a handsome cabinet.

"The rooms provided for students within the walls of the college have been fully occupied, and almost exclusively by medical students; and from the communications which, in my official capacity, I have had with parents, I am able to state that, had the means of accommodation been much greater, there would have been no lack of tenants

"I must remark, that the advantages which the resident students of this college enjoy are very great. They have good and well-ventilated rooms, sufficient attendance, and every convenience that can be reasonably required; and all this at a charge which, although now moderate, may, I hope, be yet materially reduced. They have the benefit of the superintendance and advice of a resident medical tutor, and they are under the immediate supervision of our kind and excellent principal.

"A recent occurrence of a very afflicting kind has forcibly impressed me with the advantages of a residence within the college to a youth who is away from home, and whose friends and relations do not reside in London. One of the most promising and most diligent of our students was struck down by a severe illness, and, in consequence of a rapid and extensive inflammation of the lungs, was carried of in a few days. I had the means of knowing that during the brief period of his illness he could not have been more closely attended to had he been in the bosom of his family. (Applause). He occupied a remarkably well ventilated room; from the commencement of his illness he was attended with care and judgment by the resident medical tutor, Dr. Johnson; he was visited by the principal; and his fellow students who occupied the neighbouring apartments, vied with each other in rendering him assistance. It will be no small consolation to the highly respectable family of Mr. Dennis to know that everything [wa]s done to stay the progress of his fatal malady, [an]d that he wanted no comfort which kindness [co]uld suggest, or friends supply.

"I regret that I am not able to state that there [ha]s been any increase in the accomodation for [res]ident students; but I trust that there can be [no]w little doubt of the speedy accomplishment of [wh]at which has been so long needed

"At the beginning of the session, a plan was [su]bmitted to the council, by which our accommodations for resident students would be doubled, at [a c]ost which the architect of the college estimated [at] £2,600. The council consented to advance [£1,]000 towards this work, provided the remainder [of] the sum could be obtained from other sources. [I a]m now authorised by one who has already been [a] great benefactor to this institution, and who has [ta]ken a special interest in this particular object, to [of]fer the sum of £1,000 for this purpose, and the [fu]rther sum of £300 provided the council will un[de]rtake to complete the required outlay.

"The hospital, which has now become an es[se]ntial part of the medical department of the [co]llege, is steadily advancing in public estimation, [an]d whilst it continues to afford its advantages to [th]e poor, it present an excellent field for the ob[se]rvation of disease to the students who make [go]od use of it. The number of patients registered [in] its books during the past year, exceeded that [of] the former year by 3,000. Although the funds [of] the hospital have not increased in a correspond[in]g proportion with the claims of the sick upon it, [th]is has not been for want of a lively interest in its [b]ehalf from many benevolent friends. It would [b]e ungrateful not to acknowledge, in the warmest [m]anner, the valuable assistance of its many benefactors, and the exertion of many of the committee [of] management, especially of the gentlemen who [ha]ve filled the office of deputy-chairman, Mr. [S]imon, Major Moore, and the present occupant of [th]e chair, Mr. Sambrooke. Established only seven [y]ears, the hospital has now an income, derived [fr]om annual subscriptions alone, of £1,270 per [a]nnum, and to this there has lately been added a [c]ontribution of £300 per annum from the funds of [th]e Holborn estate.

"The great increase in the number of applicants as rendered it absolutely necessary no longer to [d]elay the enlargement of the hospital for the re[c]eption of a greater number of both in and out [p]atients. The committee of the hospital have ac[c]ordingly entered into the arrangements for the [p]urchase of a large piece of ground in the neigh[b]ourhood, upon which the necessary buildings can [b]e erected. Their future appeals to the public [w]ill, therefore, solicit not only annual contribu[tio]ns for the support of the institution, but dona[tio]ns towards a building fund.

"Public attention has been a good deal attracted [to] the need of improvement in the vicinity of the [si]tuation in which King's College Hospital is [si]tuate. I cannot avoid expressing my conviction [th]at there is no part of London where improve[m]ents, calculated to afford great public con[v]enience, could be effected at a more trifling cost. [T]he step which the committee of management has [ju]st taken in the purchase of the large piece of ground to which I have referred, will, I have no doubt, pave the way for these improvements; and their project is, on this account, the more deserving of the liberal support of the public. (Hear, hear.)

"I have now, my Lord, to refer to the most important event which has occurred during the last year, as affecting the department which I have the honour to represent. I allude to that extremely wise measure lately adopted by the Council, of founding scholarships for the encouragement of diligent students in all the departments of the college.

"At the same time I must, with all humility, claim for the medical department the merit of having originated these endowments in King's College. In the year 1811 a proposal was made to the council for the establishment of two scholarships, each of the value of £10 per annum, provided they would endow one of the same value. This proposal was assented to, and at the distribution of prizes, in 1842, I had myself the honour of presenting his Grace the Archbishop of Canterbury, not only the first scholar in the medical department of King's College, but the first scholar connected with any institution for medical education.

"By the late liberal resolution of the council, six scholarships have been established for medical students of the first year—two for those of the second year—in addition to those previously established for those of the third and fourth years; in all, eleven scholarships for the encouragement of medical learning.

"Let us hope, my Lord, that some modern C[a]ius or Radcliffe may be moved to add to these e[n]dowments for the good of that science whose aim is to diminish or relieve the numerous ills to which fl[e]sh is heir.

"The conditions under which these scholarships m[a]y be obtained have immediate reference to the e[n]couragement of the students to pursue the c[o]urse of education which has been laid down for t[h]em by the Professors of this college, a course w[h]ich I firmly believe to be admirably well suited t[o] promote their best interests in a professional p[o]int of view. But there are other conditions b[e]sides those of a purely medical kind. They are s[u]ch as will satisfy us that the candidates for these s[c]holarships have not neglected studies which h[a]ve reference to their highest interests and that t[h]eir education has been conducted so as to enable t[h]em to cultivate general literature with some h[o]pe of pleasure and profit to themselves.

"In conclusion, I cannot avoid congratulating y[o]ur Lordship, who has been the zealous and e[f]ficient Chairman of the Council, and the other d[i]stinguished members of that body, on the present e[f]fective and prosperous condition of the medical, a[n]d of the other departments of this college. And I h[o]pe I may be excused for remarking, that whilst t[h]e last few years have witnessed much angry dis[c]ussion upon what has been called medical reform, w[h]ilst a Minister of State has failed in his efforts t[o] introduce more generally improvements into m[e]dical education, those who administer the a[f]fairs of this college have, unaided by state p[a]tronage or by large pecuniary endowments, f[o]unded and brought to maturity a system of m[e]dical instruction which has not only wrought t[he] most beneficial influence upon the alumni of [o]f the college, but has diffused a spirit of improve[m]ent throughout all the metropolitan establish[m]ents for medical education; the changes in which, [w]hether existing or proposed, are all in the spirit, and in imitation of that system which, by the fostering care of your Lordship and the Council, has been now for many years successfully pursued at King's College.

"In 1831, the college was first ope[ned m]atriculated medical students were required to [c]onform to collegiate rules, and shortly afterwards [t]he "Leathes" and "Warneford Prizes" were [i]nstituted for the encouragement of religious [k]nowledge.

"In 1836 rooms were provided for the residence [o]f the medical students.

"In 1841 the three senior medical scholarships [w]ere founded.

"In 1842, during the principalship of a Right [R]everend Prelate (the Bishop of Lichfield) whom [a]ll who have had any connection with the college [m]ust ever regard with feelings of the most affec[ti]onate respect and regard, a medical dean was [a]ppointed for the immediate supervision of the [m]edical department.

"In 1843 a resident medical tutor was appointed; and, in the present year, eight new scholarships have been founded, in addition to those already existing.

"I have now to present to your Lordship five gentlemen, to be elected scholars of this college."

The successful candidates, whose names are given in another column, were then presented to the Right Rev. Chairman, who briefly addressed them in an appropriate manner on the distinctions they had obtained in that college, and expressed his hope that these honours would prove an additional stimulus for greater and more persevering exertions, the real advantages of which would only become fully known to them in their career in after years.

A vote of thanks was to the chairman, and the meeting separated at five o'clock.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL. — Gentlemen admitted Licentiates on the 23rd of April, 1846: Henry Daubeny, Charles Lowis Norton, Charles Nattrass, Henry Beckwith, Robert Samuel Thornley, Richard Barnes Roscow, William Brinton, Edward Hull, Andrew Truelove Edge, William Evans, Edward Reckitt, Edward Whately.

M. Roden, a pharmacien at Lenzburg, states that leeches may be preserved by immersing them for ten minutes or a quarter of an hour, in water containing from three to four drops of liquid chlorine in the forty-eight ounces.

Dr. Labat, principal physician to the Shah of Persia, and surgeon-in-chief of his armies, who has recently arrived in Paris, attained his position in Persia by curing the Shah of gout, to which it appears he was much subject. He was appointed successively mirza, bey, and Khan, and ranks immediately after the princes of the blood royal.

The sum of 48,000 francs has been demanded from the government by the dean of the Parisian faculty of medicine, to construct a ward in the proposed Hôpital des Cliniques, to contain twelve beds, for the use of sick medical and law students. The conseil academique, and the conseil royal de l'université support the demand.

The cholera, it appears, was introduced into Persia, by the caravans of Steret into the Khorasan, and has passed thence southward to the Kerman, and onward to the marshy plains of Massendheran and Ghilon, where its ravages were very extensive. At Mesched one-third of the population has perished; and the population of entire quarters has disappeared at Teheran and Ispahan.

GOVERNMENT LUNATIC ASYLUM.—The Board of Ordnance having decided on appropriating the large and extensive building on the Denes, near Bury, originally built for a naval hospital at a cost of £120,000, for the reception of lunatic military officers, it is expected that about two hundred of these unfortunate gentlemen will be shortly removed there, upwards of £3,000 having been expended in making the establishment as complete and comfortable as possible. Some of the rooms are fitted up in an elegant manner, and several are padded all over for the more dangerous class of lunatics.

MIDDLESEX HOSPITAL.—The annual distribution of prizes at this school took place on the 9th ult., on which occasion Mr. Hunt, the treasurer of the hospital, presided. After an able address on the state of the school by Mr. Arnott, the chairman of the school, the prizes and certificates of honour were awarded to the following gentlemen:—Medicine—first prize: Mr. A. D. Home; second ditto: Mr. Sydney G. Bousfield; certificate: Mr. Augustus Grant. Surgery—prize: Mr. Bousfield; certificate: Mr. Grant. Physiology—prize: Mr. Bousfield; certificate: Mr. Boyers. Anatomy—prize: Mr. Boyers; certificate: Mr. Pates. Materia medica—first prize: Mr. Boyers; second ditto: Mr. Clapham. Chemistry — prize: Mr. John Day. Midwifery—prize: Mr. Arthur Smith. Forensic medicine—prize: Mr. Bousfield; certificate: Mr. Roberts. Botany—prize: Mr. Clapham; certificate: Mr. A. Smith. A theological prize, the gift of the Rev. D. Laing, the chaplain, was gained by Mr. Boyers. At the conclusion of the meeting a vote of thanks was moved to the chairman; and it was proposed by Dr. Merriman, and resolved, that the thanks of the governors were due to the lecturers for their endeavours during the past session to uphold the character and advance the prosperity of the school.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—*Distribution of Prizes, Session* 1845-46, *Monday, April 27th*—Sir Benjamin Brodie, Bart., in the Chair.—Clinical Medicine: Prize, Mr. Wm. J. Anderson; Honorary Certificate, Mr. Henry Landon. Clinical Surgery: Prize, Mr. Henry Gray. Practice of Physic: Prize, Mr. E. B. Batten; Honorary Certificate, Mr. T. I'anson. Surgery: Prize, Mr. Henry Gray. Materia Medica: Prize, Mr. A. Howse; Honorary Certificate, Mr. G. F. Trimnell. Anatomy: Senior Prize, Mr. James Holloway; Honorary Certificate, Mr. J. H. B. Sandon; Junior Prize, Mr. Robert Hicks; Honorary Certificates, Mr. A. Howse and Mr. Joseph G. Symes. Midwifery: 1st Prize, Mr John Lloyd; 2nd Prize, Mr. H. B. Holl. Botany: Prizes, Mr. Louis Parnell and Mr. W. P. Roberts, equal; Honorary Certificate, Mr. G. F. Trimnell.

KING'S COLLEGE, LONDON. — *Distribution of Prizes—Medical Department.*— Scholarships. Senior Scholarship, William Brinton; John Reid, *proxime accessit.* 2nd Year Scholarship, Samuel J. Augustus Salter. 1st Year Scholarship, George Robert Cubitt, John Cox Lynch, and Charles W. D. Williams. Prizes: 1st Division, 1, William Brinton, 2, John Thomas Arlidge; Henry Stevens (Certificate). 2nd Division, 1, Walter Battershele Gill, 2, John Reid. 3rd Division, 1, J. W. Wilkinson. Anatomy: Charles Thompson; Edgar Malcolm and Wm. Henry Cook, Certificates. Materia Medica: Duncan Ferguson. Chemistry: Henry B. Johnson, Certificate. Botany: John T. Arlidge, S. J. A. Salter, and Charles Thompson, Eql. Certificates. Forensic Medicine: Henry Turner Lane Rooke and John Reid; Thomas Bridgewater and John Farmer, Certificates. Comparative Anatomy: Thomas Bridgewater. Medical Societies' Prizes: 1st Prize, Henry Salter; 2nd Prize, John Thomas Arlidge; Certificate, John Reid.

WAR OFFICE, April 28.—92nd Foot: Assist.-surg. Henry Downes, M.D., from the Staff, to be assistant-surgeon, vice Millingen, appointed to the Staff, 73rd Foot; Staff Surgeon of the Second Class Neil Stewart Campbell, to be surgeon, vice M'Bean, appointed to the Staff. Hospital Staff: Surg. James Archibald Duncan M'Bean, from the 73rd Foot, to be staff surgeon of the second class, vice Campbell, appointed to the 73rd Foot. Assist.-surg. John Crespigny Millingen, from the 92nd Foot, to be assistant-surgeon to the Forces, vice Downes, appointed to the 92nd Foot.

OFFICE OF ORDNANCE, April 27.—Ordnance Medical Department: Temporary Assist.-surg. Edward Schaw Protheroe to be assistant-surgeon.

ROYAL COLLEGE OF SURGEONS.—At the last meeting of the Court of Examiners, the following gentlemen were admitted members of this college, viz.:—Messrs. R. Cockburn; B. Miller; W. Davenport; W. J. Collins; J. C. Clindon; G. A. Knott; E. J. Barken; D. E. Hamilton; H. Smith; J. Mullhanny; S. Clevasse. At the same meeting Mr. William Bennett Dalby passed his examination for naval assistant.

The Annual Distribution of Prizes at University College took place on Thursday, April 30, at two o'clock, the Right Honourable Sir Edward Ryan, Bart, in the chair, when the following honours were awarded.—Prize of £40 for general proficiency to Mr. James Hakes, of London. Medicine—gold medal: Mr. J. T. Clover, of Aylesham, Norfolk; first silver medal: Mr. F. C. Webb, of Stonehouse, Devon; second silver medal: Mr. S. F. Slatham, of Crawford, Middlesex. Botany—gold medal: Mr. William Cock, of Rance, Cornwall; silver medal: Mr. F. C. Webb. Anatomy and physiology—gold medal: Mr. Alfred Williams, of Scarborough; first silver medal: Mr. Thomas Park, of Lincoln; second silver medal: Mr. Joseph T. Clover. Chemistry—gold medal: Mr. Thomas Park; first silver medal: Bholanett Bose, of Calcutta; second silver medal: Mr. B. Davies, of Caermarthenshire. Prize essay—gold medal: Mr. William Bowler, of Tottenham. Anatomy—gold medal: Mr. W. D. Wilkes, of Salisbury; first silver medal: Mr. A. Williams; second silver medal: Mr. Joseph T. Clover; junior class, silver medal: Mr. Joseph Lawrence, of Bath. Comparative anatomy—gold medal; Soorjo Coomar Chuckerbutty of Calcutta. Materia medica—gold medal: Mr. J. W. Blyth, of Abergavenny; first silver medal: Rholanoth Bose; second silver medal: Mr. J. Lawrence. Medical jurisprudence—prize: Mr. John E. Wood, of Rochdale. Midwifery—gold medal: Mr. Thomas Park; first silver medal: Mr. M. J. Booth, of Rockdale; second silver medal: Mr. E. J. Barker, of Loughton. Pathological anatomy—gold medal: Mr. T. A. Cammack. Surgery—gold medal: Mr. John E. Wood; first silver medal: Mr. William Cock; second silver medal: Mr. J. T. Clover. Dental surgery—Mr. Richard de Champ Ball, of Plymouth. Fellows' clinical gold medals—winter Term, 1844: Mr. W. H. Allchin, M.B.; summer term, 1845: Mr. C. H. F. Routh, M.B.

OBITUARY.—On the 23d inst., at 33, West-street Brighton, Harry Blaker, Esq., surgeon, aged 61. On the 25th inst., at Daventry, John Lee, Esq., M.D., aged 44. Died, April 14th, at Carlisle, aged 77, Sir Samuel Heward, F.R.C.S. April 22nd, aged 45, William Eccles, Esq., Recently, of diseased heart and lungs, Thomas Firth, Esq., M.D., M.R.C.S., L.A., &c.

PROFESSIONAL MUNIFICENCE.—The late Sir Simon Heward, Knt., of Carlisle, a Fellow of the Royal College of Surgeons of England, has bequeathed the sum of one thousand pounds in aid of the funds of two hospitals, viz., £500 to the Cumberland Infirmary, and £500 to the hospital in the Abbey-yard, Westminster.

The late Major General Sir Robert Dick, the distinguished hero killed at the battle of Sobraon, was the son of Dr. Dick, a *general practitioner*, afterwards examining physician to the Hon. East India Company. Sir H. G. Smith, who commanded the right wing in the same engagement at Sobraon, is also the son of a member of a general practitioner, his father, Mr. John Smith, having practised many years at Whittlesea, Cambridgeshire.

The prohibition of all clinical teaching at the Paris hospitals, except by the medical officer attached to these institutions, has produced a strong feeling of dissatisfaction among our French neighbours.

A writer in the *Gazette des Hopitaux* insists that the Electric Girl is the victim of chorea, in a somewhat aggravated form, and that the existence of this malady explains the phenomena which have incontestibly been observed in her case.

Dr. Douillet, of Paris, has invented an instrument which seizing a stone in the bladder, so covers it as to allow of powerful reagents, which he affirms will dissolve any kind of calculus, and without any possibility of the touching the lining of that viscus.

FOREIGN BODY IN THE TRACHEA.—The case of a lady has been published, in whom a piece of cotton wool passed into the trachea from a carious tooth. A medical man was called in, and precipitately ran out for another surgeon to perform tracheotomy. In the interval, the husband believing that his wife was at the point of death, inverted her body; the foreign substance was expelled, and before the return of the doctors she was perfectly restored. It should not be forgotten, however, that the foreign substance in falling from the trachea might fix itself in the glottis and cause almost instant death, so that the inversion of the body cannot be considered a safe measure unless the surgeon is at hand with his scalpel.

MORTALITY TABLE,

For the week ending April 25, 1846

Causes of Death	Total.	Average of 5 summers	Average of 5 years
ALL CAUSES . . .	850	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	149	162	188
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	83	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	140	155	157
Diseases of the Lungs, and of the other Organs of Respiration	280	271	294
Diseases of the Heart and Blood-vessels . . .	31	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	67	65	72
Diseases of the Kidneys, &c.	15	7	7
Childbirth, Diseases of the Uterus, &c.	15	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	6	6	7
Diseases of the Skin, Cellular Tissues, &c.	...	1	2
Old Age	47	60	67
Violence, Privation, Cold, and Intemperance .	19	25	26

No. 345. **SUMMARY.** MAY 9.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

(From our own Correspondent.)

ACADEMY OF SCIENCES.

Meeting of the 27th April, 1846; M. Mathieu in the Chair.

Ergotine in External Hemorrhage.—M. Bonjean, an apothecary of Chambéry, forwarded to the Academy the dissected carotids of a sheep; both were divided in August and October, 1845, and hemorrhage was arrested by the external application of ergotine to the wounds. The animal was killed on the 19th of April, 1846, and the section of the vessels was healed without obliteration.

Lithotrity.—M. Leroy d'Etiolles read a paper containing the description of an entirely new system of lithotrity; by this new plan the stone is ground to powder in a few minutes by the oscillatory movements of an instrument, from the central axis of which project in every direction a number of blades and files. This pulverisation will be chiefly applicable to solitary and voluminous concretions, the common method of fragmentation, followed by immediate extraction, still being, in M. Leroy's opinion, preferable when the calculi are small or numerous. Artificial and immediate extraction of the particles of the crushed stone considerably hastens the cure, and has been already used by the author with advantage in upwards of one hundred cases.

M. Heurteloup read, at the same meeting, a paper referring to the same subject. He also advocates the immediate removal of the pulverised calculus, and asserts that this artificial extraction takes up no more time than the operation of lithotomy. M. Heurteloup brings forward, in support of this modification of lithotrity, the possibility of a portion of stone being lost in the bladder after crushing, and becoming inaccessible to instruments; and, secondly, the chances of vesical catarrh, when expulsion of the fragments is left to nature, and the dangers arising from their stoppage in the course of the urethra.

ACADEMY OF MEDICINE.

Meeting of April 28th, 1846; Dr. Roche in the Chair.

M. C. Broussais read an interesting paper "On the Climate and Diseases of Algeria," of which the following is an abstract:—

The essayist began by remarking that the important question of medical constitutions seemed to have been formerly the object of more attention than of late. This interesting study was rendered extremely difficult in temperate climates by the great frequency of vicissitudes in the condition of the atmosphere, and furnished, on the contrary, far more positive results in those countries in which the changes were sudden and less frequent. In this respect Algeria offered a rich field of observation, and M. Broussais had spent there twelve months for the purpose of investigating the subject. After a few prefatory remarks, the author proceeded to the consideration of the first part of his paper, *the Climate of the province of Algeria, and its influence on man.*

In the first place the author, considering that the hours of nine, a.m., twelve and three, p.m., generally chosen for the purpose of observation, vary but little in temperature, preferred taking thermometric observations at six, a.m., [illegible] and ten, p.m., with the assistance of a self-registering thermometer for the night. The climate of Algiers, and of the cities on the coast, such as Constantine, Tlemcen and Medeah, is mild and healthy; in Algiers no winter can be said to exist, but a rainy season, lasting from December to February. The summer is well marked by a continuance of dry heat, modified and rendered supportable by a refreshing sea breeze, which prevails from ten, a.m., until evening. The maximum of the daily temperature is at eleven o'clock, a.m.—a circumstance explained by the same cause which produces the sea breeze, viz., the rapidity with which the sandy soil and the layers of air in contact with it are heated by the morning sun. The sirocco, the wind from the desert, seldom blows more than a few days every year in Algiers; its passage is usually marked with extraordinary physical and physiological phenomena: the hygrometer falls fifteen or twenty degrees during its prevalence, and sudden deaths frequently occur. It has been very generally asserted that the freshness of the night, contrasting with the oppressive heat of the day, is one of the most important generating causes of disease in Africa. Mr. B. was also impressed with this idea when he visited Algiers, and he found, to his surprise, that, in the evening, no sensation of coolness or damp is experienced, and that, during the nights, the thermometer descends only one or two degrees below the mean temperature of the preceding day. In spring and autumn, however, the nights are cold and damp, although not so much as they are commonly in France. In order to obtain accurate data with relation to the temperature of the country, M. B. was not satisfied with examining the heat in the shade and in the sun. In this respect he has found the greatest possible variations, according as the observation was taken in the sun, in an exposed place, in the shade, or in the sun, but under cover, [illegible], at the same hour, 20 deg. in the first, 35 deg. in the second, and 60 deg. in the third situation. The city of Algiers is placed upon a hill facing the rising sun, and forms the western point of the magnificent bay, which is limited to the east by Cape Matifou. Neither in Algiers nor in its neighbourhood is there a single marsh; behind the city runs, parallel to the sea, a long line of hills, constituting the Sahel, separated from the Atlas by an immense plain, in extent 100 miles by 20, called the Metidja; beyond the Atlas is the desert. The Metidja is often covered with dense fogs; its rivers are variable in their course, and in the abundance of their waters, now forming irresistible torrents, and shortly afterwards streams of no importance; the plain itself is interspersed with dangerous and unhealthy marshes; it is divided by a fine road, leading to Blidah, and in its centre Boufarick is celebrated for its fevers and the unwholesome nature of its atmosphere. Thus Algiers, built in an amphitheatre on the sea, is a salubrious city, protected from the marshy exhalations of the plain by the hills of the Sahel, beyond which extend the fenny and damp plains of the Metidja. Such is the climate of the province; what may be its influence on the constitution of Europeans?

In temperate countries the air is rich in oxygen, the chemical phenomena of life are active, considerable expenditure of the fluids of the body takes place, and the necessity of a reparation and a nourishing diet is energetically felt. In Africa the wants of the system are not so pressing, and yet the amount of food taken by Europeans is as great as it is at home; through fear of weakness, caused by the enervating heat, many have recourse to stimulants. The blood, already too rich for the climate, becomes overloaded with fibrine, and nature generally endeavours to relieve this condition by diarrhœa, which often takes on, if neglected, a dysenteric character. The functions of the skin become for many extremely active, and abundant perspiration gradually weakens the system, particularly if exercise is indulged in to any extent—a circumstance which is looked upon by the natives with mingled feelings of wonder and pity. Hence, three causes of disease from the influence of the climate: from the too fibrinous condition of the blood, a tendency to inflammations; from the too solid nature of the nutriment in general, diarrhœa, and disorder of the digestive organs; and from unnecessary expenditure of nervous action, debility.

Durand de Lunel on Intermittent Fever. Reported by Prof. [illegible].

Dr. Durand has observed intermittent fever at Tenès, in Africa, and has stated a new theory of ague, of which we will endeavour to convey some idea. He begins with an assertion that the body expands during the day, and concentrates its circulating fluids at night; that the heat of the day is a sedative of the ganglionic system of nerves, and a stimulant to the nerves of relation; and that night and cold act in an opposite manner, calming the nerves of sensation and exciting the inner [illegible]. Here would be the real cause of periodicity. The spleen receives the miasma, and, becoming the receptacle of putrid blood, is in fact a sort of internal swamp; under the influence of nocturnal concentration, it retains the fluids, and the daily expansion throwing into the vascular system a large quantity of tainted blood, the febrile manifestation is the result. From a statistical account furnished by the observations of Dr. Maillot, of Bona, Dr. Pinet, of Blidah, and M. Durand himself, it appears that, of 6645 cases of ague, the paroxysm was diurnal in 4576 cases, and nocturnal in 2069. In further confirmation of his singular theory, Dr. Durand states that, having examined in the morning by palpation the hypochondrium of many patients affected with intermittents, he found the spleen protruding considerably below the fa

ribs; in the afternoon, on the contrary, the viscus had receded, and could no longer be felt. Such is Dr Durand's theory, and such the facts on which it is supported. From these very facts, the learned reporter drew conclusions in direct contradiction with those of the essayist. Rejecting the proposed theory as insufficient and erroneous, Professor Piorry pointed out the fallacy of M. D.'s assertion that the paroxysms of fever were caused by the contraction of the congested spleen, by which the putrid blood was forced into the system. Now, if such were really the case, the spleen should be found *smaller* during the paroxysms, and *larger* in apyrexia—a supposition contradicted by percussion. If such was the case, it is clear that the spleen, expanding at night, all febrile paroxysms should take place by day, and yet we are informed by Dr. D. himself that, out of 6645 cases of ague, the paroxysms were nocturnal in 2069 instances. This is a palpable contradiction which would suffice to overturn Dr. Durand's entire theory. But a more important objection still may be raised against it—How has Dr. Durand ascertained the increase of the spleen?—by mere palpation below the false ribs, a method of exploration which can yield only the most erroneous results. The spleen is not fixed in the hypochondrium, but varies considerably in position according to the state of repletion or vacuity of the neighbouring organs, and its precise seat, size, and shape can be correctly appreciated but by one method, viz., plessimetric percussion. By this method the constancy of enlargement of the viscus in intermittent fever is now a demonstrated fact; percussion has even shown that this enlargement may pre-exist to the first invasion of fever, and that repetition of the paroxysms is not the cause of the increase of size, which must be referred to persistency of the marshy influences which first produced it. It has further been proved by percussion that the treatment is not to be directed against the fever, but against the disease of the spleen; and that the size of that viscus is speedily reduced to its normal standard by the exhibition of the soluble salts of quinine, or of quinine dissolved in alcohol. When the fever is caused by marshy emanations, the enlargement of the spleen is constant; but when, on the contrary, the periodic symptoms are referrible to other causes, this is not the case. The opinions of the essayist cannot, therefore, be entertained.

The report was unanimously adopted, and the meeting adjourned at five o'clock.

LA CHARITE.

CLINICAL LECTURE.—*Disease of the Spinal Cord*; By PROFESSOR VELPEAU.

A man, aged nineteen, was admitted into hospital for an abscess situated on the left side of the chest. Another tumour, apparently occupying a lymphatic gland, was observed above the left clavicle. The general appearance of the patient was unfavourable, although the appetite was preserved and sleep undisturbed. He had been under treatment for one month, when he began to lose the use of his legs, complete paralysis of motion setting in rapidly; sensation, however, remained perfect, but the bladder and rectum were also soon affected by the disease. Sloughing of the skin appeared, and the patient gradually sank, but on the day of his death the preservation of sensation was distinctly ascertained all over the body. For some days before the superior extremities were partially paralysed, and considerable anasarca with ascites was present. M. Velpeau had been led to diagnose disease of the anterior portion of the spinal cord, on account of the well-marked preservation of sensation; he was induced likewise to suppose that the dorsal part was the region occupied by the alteration, the exact nature of which he could not specify. The post-mortem examination accounted in a satisfactory and interesting manner for all the symptoms observed in this singular case.—The abscess of the left mamma was found not to correspond with any disease of the ribs. The spinal column was cut open, and from the sixth cervical to the second dorsal vertebra was found a collection of concrete pus, lying between the bodies of the vertebræ and the dura mater, and causing compression of the cord, the substance of which was in a perfectly healthy condition. The vertebræ were carious on their surface, and communicated by a fistular passage with the supraclavicular abscess. The veins of the lower extremities were found obliterated by ancient clots of blood. Paralysis of voluntary motion alone, attended up to the patient's death with preservation of sensation, is in itself a sufficiently remarkable circumstance to fix your attention. The division of the spinal nerves into nerves of sensation and of motion, according to their origin, from the anterior or posterior portions of the spine, has caused of late much discussion and research, and has been generally decided by an appeal to experimental physiology. Pathology has seldom contributed to the solution of the question, and the present case is on that account most valuable. M. Velpeau has already observed an almost similar instance in a woman, who died at the hôpital Des Cliniques some twenty years ago. Paralysis was present, but sensation was preserved; a sort of fungus, of a cancerous nature, was found occupying the *anterior* region of the spinal cord.

CRUSHING OF HEMATIC TUMOURS.—You have observed in the wards a woman who presents on the outer part of the left leg a brownish tumour perforated by an incision in its centre. The tumour was produced by the fall of a heavy body on the limb. The incision was made by a surgeon who was called to the patient before her admission into hospital. This was a useless, and might have become a dangerous operation; when under the influence of any external violence blood is extravasated, it collects, or is diffused in the cellular tissue. In the latter case, absorption rapidly takes place, and no operation is necessary; in the former, the tumour can be removed in nine cases out of ten without resorting to the knife. The hematic collection might disappear by the unaided efforts of nature, but is rapidly cured by the method of *crushing*, by which the collection is changed into a mere infiltration. Indeed we may say that incision is not without its danger, as it may cause inflammation of the hematic tumour and diffused phlegmonous suppuration of the extremity. When, however, the hematic tumour has resisted all the efforts of the surgeon to produce absorption, when inflammation has set in, an incision may be necessary, but never immediately after the production of the accident.

HOTEL DIEU.

CLINICAL LECTURE.—*Intestinal Obstructions*; By PROFESSOR CHOMEL.

A patient recently died in our wards from the presence of intestinal obstruction. She was a woman, aged nineteen, of a strong constitution, and enjoying usually good health. Six months before her death she miscarried, and presented afterwards all the symptoms of peritonitis. It was impossible, on inspection of the preparation, to doubt that the inflammatory symptoms originated on the surface of the womb. It is, gentlemen, a remark we have often had an opportunity of making, that no disease is more rare than primary spontaneous peritonitis; when, therefore, you are called to a case of inflammation of the peritoneum, you should first endeavour to ascertain by what disease it has been produced, and in the detection of this primary malady you will find the most urgent practical indications. Our patient, had therefore, been affected with peritonitis consequent upon inflammation of the uterus after miscarriage. These symptoms had subsided, when about a fortnight before death new pains appeared in the abdomen, attended with frequent, almost continuous, vomiting. When she was admitted into hospital the extremities were cyanosed, the pulse 120. The vomiting continual, and the peristaltic motion of the intestines visible through the abdominal walls. The belly was not meteoric, and the matter vomited, at first of a bilious nature, soon acquired a fæcal odour, and left no doubt of the presence of an obstruction in the course of the intestine. Various purgatives were unsuccessfully exhibited, and the patient lived only forty-eight hours after admission into our wards. On dissection, the omentum was found to adhere at one point to the inner surface of the pelvis, and marks of inflammation were readily detected all over the serous membrane. In the hypogastric region solid adhesions were discovered; the first seven feet of the small intestine were in a state of considerable dilatation, equalling in size the large intestine. The digestive tube was, on the contrary, atrophied from the union of its two superior with its inferior third, and was much narrower than in health. In the exact spot where the exaggerated dilatation of the intestine ceased, the ileum was strictured by a portion of intestine lying across it, and firmly attached by one of its extremities to the brim of the pelvis, and by the other to the omentum. The occlusion occupied the left side, and above it the small intestine was half twisted on its axis. In several other parts of the pelvis peritoneal adhesions seemed also to interfere more or less with circulation of matter in the cavity of the digestive organs, the lower parts of which contained neither gas nor stercora; above the stricture was accumulated a large quantity of liquids. We found also an ulceration of the rectum, which does not seem to have any connection with the causes of death; the womb was healthy.

The disease of which this unfortunate woman presented an example has been but imperfectly studied. The names of ileus, volvulus, meserere, iliac passion, &c., have been generally employed to designate it. In the description of a disease it is not our custom to begin with the anatomical alterations; it appears to us more rational to investigate first the causes, symptoms, progress, and treatment of a disease, before entering upon the examination of the physical changes it has produced; but, in the description of some maladies, we are forcibly obliged to modify this general rule, because the anatomical alteration is the chief point—the important feature, without a correct knowledge of which no insight into the nature of the disease can possibly be obtained.

Morbid Anatomy.—The anatomical cause of obstruction will be found occasionally to reside in the intestinal cavity, in the walls of the digestive tube, or in some neighbouring organs. Thus we find that strangulation may be caused by epiploic adhesions situated in any part of the abdominal cavity. The appendices of the omentum, the appendix vermiformis, occasionally incarcerate a portion of intestine, and we have seen in the melancholy case which we related at the beginning of this lecture, that an intestinal convolution may press like a ring against another part of the tube, and obliterate its cavity. It is not impossible that strangulation of a portion of intestine may take place through a laceration of the diaphragm, and lacerations of the omentum or mesentery have been observed to give passage to and to strangulate a convolution of the ileum or jejunum. Another form of intestinal obstruction, *intussusception*, is not unfrequently observed; not that intussusception is always followed by fatal symptoms. A portion of the small intestine may accidentally be invaginated in the neighbouring part of the digestive canal without the production of any severe accident, particularly in children. You will often find in them intussusception to be merely a cadaveric alteration, or to have been produced during the last moments of life. But the most dangerous of all forms of intussusception is undoubtedly the reception of the small into the large intestine. The immobility of the colon, and the presence of the ileo-cœcal valve, render constriction inevitable, and its consequences more dangerous. We should also say that if this is the severest, it is also the least frequent form of invagination. The obstacle once established, fæcal matter cannot pass onwards; the venous circulation of the part is arrested, and symptoms of inflammation appear. The intestine may also be completely twisted round, so as to be completely impervious in one spot. This is an uncommon sort of obstruction; but has been observed in several instances, and in one case in particular, related by M. Andral, the entire mass of the small intestine was twisted by a universal movement of rotation, so as to present an insurmountable obstacle to the progress of its contents.

DAN. M'CARTHY, D.M.P.

UNIVERSITY OF EDINBURGH.—Mr. John Goodsir, the well-known anatomist and microscopist, has been elected the Professor of Anatomy in this university. He was long the pupil and assistant of a distinguished contributor to our pages, Dr. Knox.

Spain.

ANATOMICO-PATHOLOGICAL OBSERVATIONS UPON PHTHISIS.

By D. José Seco Baldor.

(Continued from page 52.)

Case 5.—*Acute Pleurisy assuming the Chronic Form; Empyema; Sub-cutaneous Abscess; Evacuation of both by Incision. Tubercles in the Pseudo-membranes and in both Lungs; Ascent of the Liver to the Superior Part of the Sixth Rib.*

A young soldier, of dark complexion, and well-constituted, came, in the beginning of April, 1837, into the Military Hospital of Saint-Isabel. From his own report, he had, two months previously, in consequence of having drunk very cold water, been seized with an acute pain in the inferior third of the right side of the chest between the anterior and lateral part, followed by other symptoms of pleurisy. He had never before suffered from any thoracic affection. On the morning of the 30th, six days after his admission, he exhibited, upon examination, the following appearances:—Face and whole surface of the body, pallid; cheeks flushed; incipient marasmus; considerable debility; hot skin; pulse frequent, small and weak; access of fever, with perspiration, in the evening and during the night; thirst excessive; appetite bad; dyspnœa; cough not very frequent; free expectoration of thick, ash-grey, homogeneous mucus which adhered to the spitting-pot reclination dorsal. In the situation, in which the pain first presented itself, a tumour, evidently formed by an abscess, augmenting with the cough, diminishing on compression; and, in both cases, exhibiting an evident fluctuation. Sound (on percussion) clear in the whole of the left side, and in the two superior thirds of the right anterior and lateral regions; obtuse in the inferior third of these regions, and in the whole posterior part: respiratory murmur very evident in the whole left side, in the anterior part of the right, to the distance of two fingers' breadth below the nipple, and in the corresponding axilla: obscure, with mucous *râle*, in the posterior part; less obscure, and with diminished *râle* in the middle third of the lateral region: extinct, without *râle*, in the inferior third, and the anterior, of this region: in the right posterior region, a peculiar sound of the voice,—imperfect œgophony,—not perceptible in the left. Diet broth and milk Pectoral decoction: opiate pills.

On May 1st, a considerable quantity of pus was discharged, by incision, from the abscess: it was wholly phlegmonous, and without smell, and at last frothy There was no evening accession of fever, and the dyspnœa was relieved.

2.—Purulent discharge thick; cheeks less flushed. Dyspnœa, as on the preceding day. Recurrence of the fever

From the 3rd to 8th, the pus, which issued from the aperture in the abscess, was clear, and small in quantity; the expectorated matter clear and very scanty; perspiration slight, and urine abundant. The patient took a nitrated demulcent decoction, alternately with the pectoral.

18.—Percussion and auscultation afforded the same results as previously to the opening of the abscess. The only difference was that the voice resounded equally in both sides, and that, in the anterior part of the right, there was sonorous *râle*. In other respects, no alteration.

9.—A cautery, of pure potass, applied to the right posterior side of the chest; and, on the 10th, another three fingers' breath above the first. During these days, the cough was less frequent; and no expectoration. Asses-milk, in a morning.

16.—A transparent serous pus continued to escape from the abscess. The dyspnœa was slight, and scarcely felt by the patient; cough, of rare occurrence; expectoration scanty; reclination equally commodious in every posture; fever much diminished; perspiration gone; bowels spontaneously moved; appetite and thirst regular; urine abundant; countenance improved; mind of the patient tranquil and cheerful. Asses-milk continued, with the pectoral and nitrated decoctions. Another cautery in the anterior right part. Goat's-milk, with an allowance of bread, and soup.

19.—A relapse; and the bread consequently withdrawn From this period, the patient grew daily worse, and died on July 21st. During this period, the fever returned every evening, and, generally, in a morning. Within the last few weeks, the debility and marasmus were rapidly aggravated by the supervention of diarrhœa. Percussion and auscultation invariably yielded the same results as previously to the 19th of May; except that the sound was dull, and respiration obscure, or quite extinct, in both sides, posteriorly. The dyspnœa was somewhat aggravated, but never extreme. The opening in the abscess became fistulous. Towards the close of life, the patient lost his appetite which had previously been good; and there was œdema of the lower extremities, commencing in the right limb.

NECROTOMY ON THE MORNING OF THE 22ND.

The right lung adherent, by all its surfaces, to the contiguous parts. False membranes attached posteriorly and to its internal surface, thick, firm, white, and, in fact, fibrous. From the superior part of the internal surface of the sixth rib to the second, passed obliquely a thick, firm, pseudo-membranous septum, which thrust the lung backwards, and kept it suspended in the superior half of the thorax. The liver rose to the point at which the lung terminated,—the superior part of the sixth rib. The left lung free in the pleuritic cavity which contained some ounces of transparent serum. Both lungs tuberculated, especially in the posterior part, which was hepatised. In the right, a few caverns, and many more tubercles than in the left. Some white small tubercles (tuberculitos) in the false membranes. Heart small, pale, and flaccid.

REFLECTIONS.

Here is another conspicuous instance of the ascent of the liver, consequent on removal of the pus which had been poured out into the right pleura. In the two former cases, the fluid had been absorbed; in the present, discharged by an effort of nature seconded by art. When it was discovered that the sub-cutaneous abscess communicated with the empyema, and that great relief succeeded their evacuation, some hopes of recovery were entertained. But inflammation of the pleura went forward: the lungs,—especially the right,—in their posterior part, were involved in the same process; and death took place; although more slowly than if the pus contained in the pleura, had not been evacuated.

The existence of the tubercles was not indicated. The empyema, the inflammation of the lungs, and ascent of the liver rendered the diagnosis obscure; and the caverns, being small and few, were discoverable neither by auscultation, nor by inspection of the expectorated fluid. The perspirations which, in chronic diseases of the chest, almost invariably coincide with the existence of pulmonary tubercles, were not, here, attributable to this lesion, but to the suppuration of the pleura and of the subcutaneous tissues adjacent to it: since they diminished, and even ceased entirely, after the evacuation of the pus.

At all events, the tuberculization, in this case, was, doubtless, consecutive to the pleurisy, and the effect of it. This fact is clearly demonstrated by the robust constitution of the patient, the integrity of the thoracic organs and their functions, previously to the pleuritis, the existence of tubercles in the pseudo-membranes, the site which they principally occupied in the lungs, and, lastly, by their greater number, and more advanced condition, in the right than in the left lung.

Nor, considered in its relation to semeiotics, is this case deficient in interest. Whilst a certain quantity of pus had been effused into the right pleura, imperfect œgophony was perceptible. When the greater part of the fluid had escaped, this phenomenon ceased; and the voice resounded equally in both sides of the thorax. Œgophony does not occur when hepatization of a great part of the lung coincides with the existence of a certain quantity of fluid in the pleura; as happened in, some of the preceding cases. In the present instance, as the hepatization of the right lung was not very extensive, and as, moreover, this morbid change occurred posteriorly to the purulent collection, there was no obstacle to the existence of the œgophony.

Case 6.—*Pleurisy, Gastritis: some Tubercles in the Lung corresponding to the Inflamed Pleura.*

A dark-complexioned, bilious, muscular soldier the son of robust parents, had been, for a long time, first in the hospital of Lavapies, and, afterwards, in that of St. Isabel His symptoms were epigastric pains, loss of appetite, thirst, disagreeable taste in the mouth. The tongue was constantly inflamed on the margins, and foul in the centre. Dyspepsia, eructations, vomiting, constipation of the bowels, pallid and yellow countenance in short, all the unequivocal characters of chronic gastritis. At first, there was no fever; afterwards, an evening-paroxysm. He lay invariably on the right side, yet neither the posture, the evening-fever, nor the progressive loss of strength and flesh, engendered any suspicion of the existence of thoracic disease. The peculiarity of reclination was regarded as the effect of habit, and the other symptoms as wholly dependent on the progress of chronic gastritis.

August 6, 1836.—The patient was observed to respire with difficulty, and cough He then stated that he had occasionally felt transient pains in the right side of the chest, particularly in the shoulder-blade; that he reclined on that side because he found his respiration worse when lying on his left, and that his cough, constantly dry, had existed, more or less, for eight days. The left side of the thorax emitted, everywhere, a natural sound, and the respiratory murmur was clearly perceptible. In the superior half of the right side, it was clear; in the inferior, obscure, or perfectly extinct. The sound, on percussion, also, was more or less obtuse; and, in this side, there was manifest œgophony, especially in the posterior part.

With such symptoms it was impossible to doubt the existence of chronic pleurisy of the right side; which contributed more than the gastritis to the production of the evening-fever. To the plan of treatment already employed, was added the institution of a caustic issue in the diseased side of the thorax, but without effect. The fever continued with severe evening and night-exacerbations; during which the dyspnœa was aggravated; the cough frequent, and heat of the skin intense, followed by profuse perspirations over the upper half of the body. The debility and emaciation increased; the respiration became puerile in the left, and extinct in the whole of the right side, except near the track of the vertebral column. The œgophony disappeared; and the sound became obtuse over the whole of this side. The patient sank exhausted, on August 26th.

NECROTOMY A FEW HOURS AFTER DEATH.

Abdomen.—The whole gastric mucous membrane, of a deep-red colour, and, in some points, so much softened, that on slight scraping with the scalpel, it separated from the muscular coat, as though it had been a pulp applied to that membrane. The duodenum, in parts, somewhat red The remaining portions of the intestine healthy The whole digestive tube meteorized, especially the stomach and duodenum. Some transparent serum, without vestiges of inflammation, in the peritoneum. The liver projected two finger's breadth below the margin of the ribs. Other abdominal viscera sound.

Thorax.—Adhesion of the right lung to the contiguous parts. Between the pulmonary, costal, and diaphragmatic pleura, divers pseudo-membranous cells, containing a great quantity of gelatiniform serum; which, while compressing the lung against the vertebral column and the heart, thrust the liver downwards, and caused it to project below the margin of the ribs. The pulmonary parenchyma neither indurated, softened, nor affected with hyperæmia. The only lesion which it exhibited was *some minute tubercles*, congregated in a small space, near the surface. The left lung was perfectly sound, and pervious to the air; but small in volume At least, there existed a considerable space between it and the ribs. The bronchial mucous membrane, pale and healthy.

REFLECTIONS

The principal interest of this case consists in its incontestibly demonstrating that the tubercles, developed in the right lung, were not of constitutional origin, since the subject exhibited no sign of tubercular predisposition; and that they did not induce the pleuritis; as they were too few in number, and occupied too small a space, to excite inflammation and suppuration of the whole membrane. Neither could they be regarded either as cause, or effect, of a bronchitis which was not an

nounced in the living, nor met with in the dead body. They were in fact, excited by the pleurisy, and posterior, in date, to the empyema. This was clearly indicated by their nascent condition their limited number, and the situation which they occupied, in the vicinity of the pulmonary pleura, inflamed as all the other portions of the right pleura were.

Laennec, if he had witnessed this dissection, would have been driven to extremity in proving the priority of the tubercle. Few cases could occur, so well calculated as this is to subvert his opinion, and establish the correctness of the views of Broussais and other writers, who concede to pleurisy the power of occasioning the development of tubercles in the lungs provided there exists a corresponding predisposition, innate or accidental (in the patient's system) for without this, such development is impossible. The predisposition, in this subject, was accidental, and produced by a deteriorated state of the blood and of nutrition as happens in other cases in which the tubercular diathesis manifests itself when, in consequence of some chronic malady, the blood has become vitiated, and the patient exhibits as the ancients termed it, a cacochymic and ill-conditioned appearance. The individual constitution under these circumstances, becomes identified with, or resembles, that of persons possessing an innate predisposition to the development of tubercles.

Percussion and auscultation were, here, very useful as instruments of diagnosis since they not only detected the inflammation of the pleura but indicated, with great precision, the progress of the empyema.

The obscurity in which the origin and progress of this pleurisy were involved, presents nothing remarkable. Frequently, during the course of a chronic disease, others become developed, which have not been suspected to exist in the living, and are discovered with surprise, in the dead subject. Nevertheless, had this man communicated the fact of the occurrence of the lancinating pains in his chest, and the inconvenience resulting from reclination on the left side, the pleurisy might have been detected by percussion and auscultation, previously to its discovery from the cough and dyspnoea. In military hospitals, if the physician do not take the trouble of examining, daily and with great attention, all his patients, many of them will pass days, and even weeks, without communicating to him any new ailments particularly when they apprehend that a reduction in the allowance of food may be the consequence of such communication. It is impossible to say whether, under any circumstances, this patient would have recovered but had the author's attention been directed, at an earlier period to the state of the thoracic organs, so much valuable time would assuredly not have elapsed without a strenuous effort to resist the invasion, and check the insidious progress, of the pleurisy.

It may be remarked that the parenchyma of both lungs was untouched, with the exception of the few incipient tubercles developed in the right, and that the bronchial mucous membrane was, moreover, perfectly sound. These circumstances explain the tardy occurrence of the cough, and its dry character to the close of life. Here, also, is an instance of the [illegible] of the liver, as shewn in case 4.

With regard to the inflammation of the stomach, it not only occupied the whole mucous membrane which was, in part, manifestly softened, but had propagated itself to the duodenum although in the intestine simple hyperæmia, only was observed.

(To be continued.)

England.

OVARIAN DISEASE.—Mr Middleton, in the *Provincial Medical Journal* describes the case of a patient of his who was affected with ovarian disease and who sunk exhausted fifty-three days after he had practised paracentesis abdominis. The body was inspected twenty-six hours after death. Upon opening the abdomen, about a pint of clear ascitic serum, escaped from the peritoneal cavity. After separating by the hand the probably recent peritoneal adhesions existing between the abdominal parietes and the anterior aspect of the tumour, a large irregularly distended bag became exposed, of a strong fibrous texture, having an uneven surface, and apparently subdivided into several compartments containing fluid, while more or less connected with solid matter above and anteriorly. A small quantity of fluid lymph was visible in a slight depression on its surface. After getting through the omentum, which was extended over, and firmly adherent to, its upper surface, it was found intimately connected posteriorly with most of the contiguous structures, by numerous thick layers of a strong membranous character, consolidated together into one mass, which was exceedingly difficult to overcome, and its detachment and removal could not be effected without much rough work with the knife, and the escape of the contents of several large cysts, containing many pints of fluid of a sero-purulent character, which displayed, by the consequent collapse of a portion of the structure, the mixed nature of this anomalous development. The bladder at its upper part was firmly fixed to it, while the uterus was entirely unconnected, being perfectly distinct, although smaller than natural, and having internally merely lost the triangular character peculiar to its healthy condition. The left broad ligament was obliterated by its extension over this large collection of disease, seemingly constituted by the enormously increased left ovarium, with its tube imbedded in it. The right ovary was small, but healthy, and the tube of this side was extended adherently upon the under surface of the tumour the cul de sac, between the vagina and rectum, was curiously lined by a dark bluish membranous exudation, detached with little difficulty, probably from the congested capillary hæmorrhoidal veins. The stomach and bowels were much attenuated from long inanition, the latter also extensively matted together by adhesive inflammation. After pressing out from some of the cysts a large quantity of sero-purulent fluid, containing numerous little flakes and masses of a curdy consistence, the examination of the structure after removal, more clearly demonstrated its heterogeneous nature. It contained numerous large cysts, which upon opening were found to contain others, successively diminishing to three or four deep. They were distinct, and distended with serum, in which floated, in many instances, long streaks of a soft gelatinous substance, many smaller conglomerated together, confining a yellowish serum, and on the lower right side a small nest of true hydatids was attached, about the size of grapes. The interior of this structure seemed to some extent broken up by the ulcerative process, which had destroyed the cystic arrangement, and no doubt poured out a sufficient quantity of pus, which, by being blended with the proper cystic secretion, had given character to the bulk of the fluid. This altogether amounted to twenty-four pints. The solid portion, situated at its upper and anterior aspect, was chiefly of firm consistence, and more or less elastic, it had a smooth surface, and was of a light liver colour, while several parts, inclining more internally and more immediately in contact with the cysts, were of a looser and more spongy character. Dividing it with a knife displayed its fibrous texture, and afforded in many of its parts so many excellent illustrations of encephaloid disease. In others ulceration had made considerable progress, partly reducing the structure, and having it of a distinctly cellular character, exemplifying another interesting form of disease, the honeycomb structure. In several different portions, when dividing the solid matter, occasionally would appear an isolated hydatid, about the size of a small walnut. The weight of the solid matter was altogether thirteen pounds. It is certain ovariotomy could not have been practised in this case, on account of the numerous and important adhesions the diseased ovary had contracted with the neighbouring organs.

CROTON OIL IN DELIRIUM TREMENS.—Mr Prankerd has published, in the *Provincial Medical Journal*, a communication on the employment of croton oil in delirium tremens. He says, in the treatment of this disease, to procure sleep, and thus prevent the continuance of the delirium, is the great object to be attained, and opium would at first appear the remedy most appropriate to fulfil this indication, but his experience leads to a different conclusion. As far as it extends, opium has entirely failed, or, where sleep has been induced, the patient has awakened with many of the symptoms aggravated. In the *Dublin Journal of Medical Science*, January, 1841, Dr Ware, of Boston, United States, published a statistical account of sixty-nine cases of delirium tremens, of eight patients who were treated by large doses of opium, four died, of seven treated by small doses, two died; thus giving six deaths out of fifteen cases, in which opium was the principal remedy employed, whilst in the remaining fifty-four, in which opium was not used, or only incidentally in small quantities, only five died. This difference in the results of treatment Dr Ware considers too great to be attributed to accident, and to go far to establish the truth of the opinion that opium, in large doses, is actually injurious to patients labouring under delirium tremens. The acknowledged benefit derived from the administration of croton oil in certain nervous diseases, attended by a high degree of excitement, such as hysteria, epilepsy, neuralgia, &c., combined with the failure of opium in those cases of delirium tremens which have fallen under Mr. Prankerd's care, first induced him to give this medicine a trial in this formidable disease, and the success he experienced has been such as to lead him to publish the result, the more especially as, although he has frequently met with complaints of the insufficiency of the usual mode of treatment, he has not seen any detailed account of cases in which this remedy has been employed. Five cases of delirium tremens are recorded by him, in the first two opium alone was relied on, and both patients died, the first took six grains of morphia and five grains of opium, equal in all to seventeen grains of opium (allowing one grain of morphia to be equal to two of opium), in less than twenty four hours, without procuring sleep, and the other took fifty seven grains of opium and twelve of morphia (equal to eighty-one of opium) in six days, besides using morphia endermically, with camphor, ammonia, and various stimuli, internally. The third patient took thirty-six grains of solid opium, one grain and a half of morphia, and a drachm of Battley's solution, in four days, the disease continuing to get worse, when Mr Prankerd prescribed the croton oil as follows:—℞ Ol. tiglii, ♏ viij., Mist. acaciæ, ℥j., Syr. rhœad., ℥ss; Aquæ puræ, ℥iv. M. Capt. coch. larg. ij omni horâ. After the patient had taken eight doses of this medicine, he was very freely purged. The excitement gradually lessened, and he had refreshing sleep for several hours. Alteratives and gentle aperients were afterwards used for a few days, and he perfectly recovered. He afterwards experienced a second attack, and Mr Prankerd not being then fully satisfied as to the effects of the croton oil, had recourse to opium in large doses, giving it in various forms, equal in amount to 169 grains of the drug in the course of six days, but without permanent benefit. On the seventh day he began with croton oil, giving a drop every half hour, after eighteen doses had been taken, which had a most powerful effect on the bowels, the patient had refreshing sleep, and all the symptoms were relieved. A little stomachic medicine only was afterwards required. In the fifth case, one of delirium tremens complicating a fractured and ulcerated leg, ten drops of croton oil were given in seven hours, and two drops a few hours after. The relief was most decided, and the patient got well. In some remarks on these cases, Mr Prankerd observes that they will, he thinks, justify him in concluding that the administration of croton oil is attended with decided benefit in cases of delirium tremens—a disease complicated generally with other affections, chiefly those of the liver and stomach, the depraved secretions of which may in many instances, keep up the irritation. But to the removal of these he does not attribute the favourable result, but rather to the croton oil acting as a direct sedative to the nervous system. He considers it of minor importance how sleep was procured, so that it was of sufficient duration to produce a permanent effect on the disease, and the benefit occurring in these cases has been so marked as henceforth to give him a decided preference for its administration. The quantity given in so short a time would appear almost incredible, but as he had often given a drop every quarter of an hour in epilepsy to the extent of twelve or fourteen drops, he felt justified in continuing the

emedy until the effect sought for occurred; and in no instance has he observed any bad effect follow its administration It will be seen that opium had a fair trial At one time he gave it in moderate doses, gradually increasing, at another a full dose, followed by smaller at short intervals, at another continued large doses. He used the solid opium, and various preparations—laudanum, black drop, Battley's solution, and morphia—and in neither of the cases did he observe any decided benefit; sleep was often procured, but never sufficiently to renovate the nervous system.

GALVANISM IN UTERINE HÆMORRHAGE.—Mr. Wilson, in the *Provincial Medical and Surgical Journal*, describes a case of severe uterine hæmorrhage, occurring in a woman, thirty-four years of age, about two months advanced in pregnancy, and which had been going on for about a week before he saw her In spite of the internal exhibition of gallic acid and ergot of rye, the use of the tampon and vaginal and rectal cold water injections, the hemorrhage continued, and at last the case appeared to be utterly hopeless. The patient could no longer swallow the brandy, and was only roused from a state of apparent insensibility, bordering on syncope, by the scarcely interrupted application of ammonia to the nares The pulse had almost forsaken the wrist, being doubtfully perceptible, the eyes remained rigidly open, and fixed; in short, death seemed imminent As a *dernier* resort, with but faint hopes of doing any good, Mr. Wilson resolved to try galvanism, as suggested by Dr. Radford. A copper wire, coated with thread and sealing wax, with a ball of moistened sponge, about the size of a nut fastened to one end of it, served for a vaginal conductor The sponge was passed within the os uteri and there retained. The conductor from the other pole of the apparatus was then applied over various points of the sacrum and loins, and shocks and continuous currents of the galvanic fluid transmitted through the parts intervening between these points and the sponge at the os uteri Ten minutes elapsed ere the patient appeared sensible of the galvanic agency The first indication of this was observed in her countenance, her glassy, corpse-like eye, brightened up with something of its wonted expression In the course of ten minutes more the pulse was more distinctly perceptible, and she complained of pain in the abdomen After continuing the galvanic influence for a few minutes longer the apparatus was withdrawn A decided improvement soon followed, and although she suffered for some little time from the effects of excessive loss of blood, under judicious treatment her recovery has been progressive and satisfactory.

[The following are the only articles of interest to the profession in the last three numbers of the *Lancet*.]

THE ALKALOIDS.—The Messrs Smith contend that there can be no real difference in the action on the human economy of the acetate, muriate, and sulphate of morphia, and they consider that the reasons which should lead to giving a preference to any one salt of an alkaloid are the following:—Which is the most readily and easily prepared? which is most readily got in a state of purity, and sufficiently soluble? and which is least liable to change or decomposition? Taking these characters for guides, in the case of the morphia salts, the muriate ought decidedly to have the preference. In the case of the quinine salts, the sulphate should be preferred, for on account of its sparing solubility on crystallising, the greater part of the impurities are left behind in the abundant mother liquid It has also occurred to them, that it might be advantageous to medical men to suggest, that in administering externally some of the alkaloids, such as aconitina and veratria, in the form of ointment, the activity of the remedy would be more [illegible] secured by dissolving them in a few drops of a weak acid, such as the acetic, before mixing them with the ointment In this way their [illegible] more effectually secured, and disappointment in the result less likely to happen.

HYDATIDS OF THE UTERUS DURING PREGNANCY.—Mr Yeates Hunter describes a case of parturition to which he was called, and on examination per vaginam, he found the os uteri dilated, and the head presenting; but the presentation was by no means distinct, and was ascertained with some difficulty, because a soft pulpy mass (evidently not the placenta) intervened between the presenting part and the finger. After a few pains the membranes ruptured, at which time he heard a very peculiar crackling noise, and on again examining the patient, the infant's head had passed below the pulpy mass, which was then beyond his reach The labour progressed very favourably, and the child, which was small, was born in less than two hours after his arrival. After waiting some time, it became necessary to remove the placenta. When the hand was introduced for the purpose, the uterus was found distended by what afterwards proved to be hydatids, measuring about three pints. They were in clusters, like bunches of grapes, some of them being the size of hot-house grapes, but others, and by far the greater number, of the size only of the common blue cluster grape When the placenta was detached, it was found to be lobulated, and of an average size, the hydatids appeared to have been attached to a part of its margin, as well as to the uterus. The patient is doing well Mr. Hunter remarks that he never before saw or heard of a case in which hydatids of the uterus were found in the pregnant organ, and that his medical friends consider the case to be unique and interesting We can assure him that although certainly interesting, it is by no means unique. We had about a year ago under our own care a case of hydatids of the uterus, which were spontaneously discharged after the termination of labour, and other cases of a similar nature have been placed on record.

INFANTILE BRONCHITIS.—Mr Thomson thus states his plan of treating bronchitis in very young infants. If the child be but newly seized, and a good deal "stuffed at the chest," the pulse and breathing very frequent, and the heat of surface much increased, he gives calomel and ipecacuanha, of each a quarter to half a grain every three or four hours, to infants from two or three weeks to two or three months old, a grain of each to those from three to twelve months, less or more, according to the strength of the child and severity of the symptoms. Should the first dose produce vomiting, and several others be retained, so much the better; occasional vomiting, when not severe, is rather in favour of than against the treatment, as much viscid mucus is discharged thereby. As the cough, difficulty of breathing, and other symptoms, are generally worse toward evening and during the night, followed by a remission toward morning and during the day, the calomel and ipecacuanha ought to be given as above while the severity of the exacerbation continues; and from a third of a tea-spoonful to a full tea-spoonful of the following mixture, every two or three hours during the remission:—℞ Potassio-tart. antim. [illegible], ʒij, vini [illegible], ʒj; sol muriat morphiæ, tinct hyoscyami, āā m xx.; syr. tolu, ℥ss; aquæ, ℥iss. M The rectum should be cleared out with warm water-and-milk, and the child placed in bed, with its head and shoulders elevated, otherwise the efforts to cough and expectorate may never be effectually accomplished. The nurse should also lie in bed with it, especially during very cold weather, in order to maintain the proper degree of warmth, which is much better than heating the air of the room to the temperature frequently required. This plan will succeed in recent and not very severe cases, or in the first stage of the disease. But should the case become worse—face livid, eyes closed, breathing still more frequent, short, and gasping; nostrils widely dilated with each inspiration, heaving of the chest and shoulders, the air scarcely penetrating the bronchi, which are filling fast with secretion, every expiration being succeeded by a [illegible] moan; inability to take the breast; [illegible] it is still highly proper [illegible] the use of [illegible] and ipecacuanha [illegible] will [illegible] blistering the chest [illegible] with perfect safety, while the loss of a very small quantity of blood would speedily [illegible] termination, by prostrating what remains of the vital powers. Mr. Thomson says, he has several times seen fatal effects from loss of blood by leeches applied to infants under twelve months, in this and other diseases; while he has never seen any danger arise from blistering very young infants with the common cantharides plaster, applied to the bare skin without any interposing substance The "severe sloughing" and other mischief which sometimes take place, must be, he thinks, in consequence of culpable neglect in allowing blisters to remain on until they produce an "escharotic," and not simply and solely a rubefacient effect This can be effectually produced by leaving the common blistering plaster (spread thin on fine cotton or white calico, and its surface smeared with olive oil) on until the skin becomes red, which will happen in two, three, or four hours, according to the age of the child, strength, and temperature of the skin. A soft warm poultice, in a muslin bag, oiled, ought then to be applied over the reddened surface for two or three hours, when the cuticle will be found elevated half an inch, and full of serous fluid, and great relief afforded to the little patient. The blistered surface must be dressed, until healed, with lard, fresh butter, or any simple unctuous substance, spread on very fine cotton. The practitioner should not order a blister to remain on an infant for a definite period, but direct its removal as soon as redness is produced, which the nurse can easily ascertain by paring its edge occasionally Of course, the acetum cantharidis has its advantages, but it cannot be applied under every circumstance. As soon as the more dangerous symptoms have been subdued, the use of the above mixture ought to be resumed or commenced, and if given at bedtime, and during the night if required, it will procure rest and promote expectoration.

ELEPHANTIASIS.—Mr. Biscome considers elephantiasis to be the sequela or degeneration of some other disease, generally from repeated attacks of erysipelas or from a want of tone in the lymphatics, induced by a sort of sub-inflammation When it arises from erysipelas, it is generally more or less complicated with visceral disease, it is more local in its character, when it results from the last named cause. When the sequela of erysipelas, it is not until after repeated attacks of that disease, and longer persistence of each attack, that enlargement of the part ensues, the inflammatory action at each accession seemingly penetrating deeper, involving the whole of the subcutaneous cellular substance, producing infiltration of that tissue, and, ultimately, extensive partial disorganisation, which, degenerating into a variety of shapes, becomes studded with stone-like excrescences or protuberances, intersected, especially about the instep and ankle, with weeping fissures or rhagades, partaking of a sandy or horny appearance When it commences in the lymphatics, a weariness is felt along their course in the limb and a numbed sensation, as though it were (as it is termed) asleep, a dull, deep-seated, gnawing pain is always present, causing a sickening at the stomach, amounting sometimes to vomiting, and unfitting the patient for general exertion. It is unattended by fever or discoloration (rosy-blush, as in erysipelas); the pulse is small, feeble, and frequent, tongue pale, or white, and the limb imperceptibly enlarges, assuming a doughy feel, the temperature being lower than natural Should the scrotum be fastened on, a puffiness and intolerable itchiness are present, and if the surface be abraded by scratching or otherwise lymph exudes profusely therefrom, forming crusts, which, adhering firmly, induce an unpleasant prickly sensation when in contact with the clothes. The parts, by-and-by, become [illegible] into lumps, and run into one [illegible] mass, attaining, in some cases, to an enormous size, with so little sensation as to admit of its being kicked about like a foot-ball; in one case, when amputated, the scrotum weighed ninety-two pounds avoirdupois, filling a pork-barrel! A leg which Mr. Biscome amputated above the knee, having been dissected, the disease seemed to have been seated in the subcutaneous cellular tissue, the muscles, ligaments, &c., being apparently comparatively sound, the infiltrated or hypertrophied substance at the back of the leg, the calf, measuring six inches and a-half in depth or thickness, consisting of a fatty bacon-like substance, with few bleeding vessels The bloodvessels (veins) above the knee, where the knife was applied, were unusually large, admitting, at the onset of the operation, of such a rush of blood as to give for the moment the idea that the artery was not properly under command On the inspection of a scrotal tumour, in which the

substance was very similar to that of the leg, it was found to be interspersed with hydatid-like forms, from which, when cut into, a tenacious transparent fluid escaped.

Partial Sloughing of the Penis.—Three cases of partial sloughing of the penis are reported from St. Bartholomew's Hospital. In the first case, that of a stout, healthy labourer, the mortification evidently resulted from the intensity of the inflammation of the organ. Hemorrhage occurred to a considerable extent, on two occasions, from a sloughing sore on the glans and body of the penis, which was exposed by the division of the prepuce. The patient recovered, but lost one-third of the prepuce, and two thirds of the glans, having besides an abnormal opening into the urethra, at about a quarter of an inch from the natural orifice, by which the greater part of the urine passed. In the second case, a lad of weakly habit, the mortification, which was to the extent of a five-shilling piece, may be referred to want of tone of the system. He was pale and anxious, the pulse feeble, and the extremities cold, with a white tongue, no appetite; no sleep. Mr Lawrence immediately divided the prepuce in its whole superior length, an operation which did not cause the loss of much blood. There was a spreading sloughing sore, which had destroyed three-fourths of the glans penis, and the whole internal lining of the prepuce was mortified. The apex of the glans, containing the orifice of the urethra, was still sound. The treatment consisted in the exhibition of opiates, stimulants, tonics, and nourishing diet; in a few days the slough separated, the whole of the prepuce and four-fifths of the glans penis being destroyed, but the urethra being quite uninjured. The wound granulated healthily, and about six weeks afterwards he was discharged, with the wound nearly cicatrised. The third case is one of phagedenic and sloughy sore, also dependant on want of tone, apparently caused by habits of dissipation. The prepuce was divided, the reason for which is not clearly assigned, and the man supported by good diet, &c. The treatment pursued was rather vacillating, and the progress of the case equally so, but ultimately under the use of dietetic tonics and the local application of a solution of nitrate of silver, the man recovered. He was afterwards re-admitted with secondary symptoms. After detailing these cases, Mr Holmes Coote, by whom they are reported, remarks that the thin integument, which is reflected from the inner surface of the prepuce, over the glans penis, affords a very inconsiderable protection against the venereal poison; hence, primary sores most commonly occur in this situation. Whatever may be their form, they are, for the most part, readily amenable to ordinary treatment. Circumstances, however, may entirely change their aspect, and convert the ulcerative into a sloughing process; the venereal poison is then destroyed by the activity of the local disease, and the patient recovers with a mutilated organ, but free from risk of secondary symptoms. The causes of sloughing may be arranged under three heads —1. Neglect on the part of the patient, in a constitution enfeebled by intemperance or insufficient food. 2. Acute inflammation of the part. 3. Some unfavourable relation between the constitutional powers of the patient and the venereal poison, giving to the latter an especial virulence. The occurrence of acute inflammation is a very untoward ... the glans penis swells, and becomes ... the inflamed and swelled prepuce, and ... tion or sore, inclosed between two opposed mucous surfaces, rapidly assumes an unfavourable aspect. The discharge, losing its puriform character, becomes ichorous, or sanious, and offensive in smell; sloughing next ensues, which may involve, not only the glans, but also the whole inner lining of the prepuce. This rapidly destructive process, extend to some large arterial trunk before nature has time to plug the tube, leads to violent and uncontrollable hemorrhage. If the prepuce be not divided early, it mortifies, and thus liberates the glans, the slough upon which separates, and generally leaves a healthy granulating surface. It occasionally happens, however, that the liberation of the glans is not followed by such marked improvement; the sloughing process goes on until the whole glans is destroyed, and the extremities of the corpora cavernosa are denuded. Considerable judgment is required in the treatment of these affections. If local congestion exist, it must be relieved; the sore must be liberated from pressure, the pulse restored to its natural standard, and the nervous system quieted. The two first objects are attained by the division of the prepuce; the arteriæ dorsales penis divide, and form a ring around the corona glandis; two sets of branches are given off, one to the glans, the other to the prepuce. Division of the latter at once abstracts blood from the former. But how is it to be known when a sore is about to slough under a prepuce, inflamed, swollen, and contracted at its orifice, so as to be incapable of withdrawal? The discharge, losing its puriform character, becomes ichorous or sanious, and extremely fœtid, and flows from under the prepuce in great abundance. The least pressure upon the exterior causes intense pain, the patient generally exhibits febrile symptoms, and the pulse is full, hard, and bounding. When mortification to any extent has ensued, with the same local symptoms the pulse rapidly sinks, and the patient becomes feeble, restless, and dejected. The glans penis is more completely liberated by division of the upper than of the lower half of the prepuce; but the latter section is sometimes preferred, in consequence of its causing less deformity. When the sore has been liberated, and the bleeding has ceased, a warm bread-and-water poultice is the best application. Febrile symptoms, if present, must be subdued by suitable remedies, and by low diet. If the patient is feeble and depressed, stimuli and liberal diet may be necessary, as in the cases here related. Pain must be quieted and rest obtained, by the judicious employment of opium, and the patient must be put in a roomy and well-ventilated apartment. The general constitutional disturbance marking the progress of these cases contra-indicates the employment of such a remedy as mercury, the action of which is of itself sufficient to produce a state of irritable feverish excitement.

Nitrate of Silver in Venereal Sores.—Mr. Acton states that experiments on inoculation have incontestably proved, that if caustic be employed soon after the receipt of the virus, all further effects may be stayed; they have, moreover, shown that up to the third day the disease is of a local nature, entirely confined to the parts with which the virus has come in contact, and that it is not necessary to cauterise beyond the extent of the ulcer, but that, on the contrary, the doing so is fraught with great mischief. A patient, thinking he can treat his own case, and following, as he believes, his surgeon's plan, employs nitrate of silver most bountifully; great pain is produced; a deep eschar comes away in the course of a few days, the irritability of the organ is greatly increased; and being unable ... over the glans, the patient seeks the assistance ... his surgeon, who, after carefully examining the parts, finds the original sore re-inoculated, and perhaps several other small ones in the neighbourhood. Such cases clearly show that the employment of caustic may often do more harm than good; that while the nitrate of silver destroys the virus of one ..., the irritation it produces prevents our seeing the mischief accruing to others; and probably the non observance of these rules leads to caustic being much abused. If a surgeon will inoculate a man, and watch the effects, he will find that at the commencement he can destroy effectually the virus by the slightest touch of the salt; little or no irritation will follow, and the application may be repeated at intervals. Before the nitrate of silver is employed, the part should be carefully cleansed by being soaked in warm water, for the virus may exist on the surface of the neighbouring skin, and if not washed off will re-inoculate the sore when the little eschar falls, and undue blame will be thrown on the caustic. Although no other ulcer exists at the time of using the salt, frequently in a few hours after, another sore, or a little pustule, will be met with, which, if precaution be not taken, will go on increasing, and the disease will spread rapidly. These circumstances explain several anomalies which have thrown discredit on caustic. The parts should be carefully dried, ... it be an excoriation the surgeon is called on to treat, the skin should be put on the stretch, and the ... stick of nitrate of silver ... lightly passed across it, so as effectually ... the surface in its entire extent, all cracks and crevices must be treated in the same way. If a pustule exist it should be opened with a lancet, the pus evacuated, and a pointed stick of the nitrate of silver introduced, so as to cauterise the walls of the pustule. For this purpose the caustic should always be kept pointed; and this may easily be done, by wetting it, and rubbing its sides against a piece of soft wash-leather. It is very difficult to obtain a point by scraping the stick of nitrate of silver, in consequence of the brittleness of the salt, but when once obtained, the caustic will retain its pointed character. If the surgeon is called upon to treat chancres at the orifice of the prepuce presenting the appearance of cracks, he must draw back the prepuce gently, when he will be able to cauterise the entire extent of the chancre, but in repeating the operation, let him ... d against breaking through the cicatrix, or this ... r chancre will extend; the same observation applying to the treatment of chancres of the frænum; to obviate the difficulty of healing such ulcers, Mr. Acton divides the frænum, and cauterises the entire of the divided surface. Without these precautions, it may be weeks before such sores are healed. Reliance must not be placed alone on the salt, and previous ablution, but extension of the disease should be stayed by lotions of an astringent kind; such as a solution of pure tannin, in the proportion of two grains to the ounce of water, which not only checks the discharge, but seems to tan or harden the skin: the private patient, however, should be told, that this solution slightly stains his linen with a brown mark, or the lotion may tell tales to the family; to obviate this, a weak solution of sulphate of zinc may be employed, or, if desirable, dry lint; but dry lint has the objection, in some instances, of irritating the part, and, moreover, the little eschar is a long time in falling, and the caustic cannot soon be re-applied. The caustic may be used once in the twenty four hours. The surgeon will occasionally be disappointed in finding chancres progress less favourably than here stated; in spite of all his attempts to cure them, caustic fails, this is more especially witnessed in ulcers situated around the narrow prepuce, at the frænum, orifice of the urethra, or fourchette in the female, it is the situation of the sore rather than the want of efficacy in the remedy that prevents cicatrisation; rest and attention to cleanliness, without rupturing the cicatrix, will alone bring about a cure, in these instances it is vain to continue the caustic; its objects can be no longer attained, and it produces much mischief.

Fracture of the Humerus.—Dr Bernecastle describes a case of fracture of the humerus occurring in a navigator from muscular action. The man had previously been the subject of rheumatism, especially affecting that arm. The bone united readily, and the patient is reported not to have suffered from his previous malady—rheumatism—afterwards. Six years previously he had salivated himself for gonorrhœa, but to what extent is not stated, nor is any information given respecting the presence of the signs of syphilis, or of the consequences of undue mercurialisation.

Disease of the Brain and Urinary Organs.—A case is reported from University College Hospital, of a man who was apparently first seized with symptoms of influenza, accompanied with intense headache, followed by bloody urine, which afterwards contained pus. This was succeeded by inflammation of the penis and corpus spongiosum, proceeding to suppuration; latent pneumonia also ensued, and the case terminated fatally. The examination of the body was made eighteen hours after death. It was rather emaciated; the walls of the abdomen contained about half an inch of fat; there was considerable cadaveric rigidity; there was no eruption or abrasion of skin; the muscles were of a dark, unhealthy colour. The calvarium and dura mater having been removed, a number of opaque spots were observed on the surface of the arachnoid; these were very generally diffused, extending backwards to the base of the brain; these spots varying from the size of a pea to that of a penny piece. Beneath the arachnoid was a small quantity of serum; the membrane peeled off readily. The pia mater was unusually injected; indeed, the whole brain appeared too vascular. On cutting through the hemispheres, a coagulum was observed, about the size of

a small pea, in the posterior lobe of the left hemisphere. There was no fluid in the ventricles; the choroid plexus was dark and unusually congested. A coagulum about the size of a small hazel nut was observed in the right posterior lobe of the cerebellum. The bronchi were rather thick and firm; there was a slight amount of emphysema at the apex and margins of the left lung; there were some opaque tuberculous deposits at the apex of the right lung, but in the pleura posteriorly, covering the middle lobe of the right lung, was an opaque deposit, about the size of a shilling; this was very firm and resisting to the knife. Below this there was a circumscribed softening, of a dark colour, about the size of a hazel nut, with induration of the parenchyma around, intensely fetid, of a distinctly gangrenous odour. The seat of this morbid appearance corresponded to the situation of the dulness during life. Right lung weighed eighteen ounces and a half; left, sixteen ounces. The heart was large, pale, and softer than usual; the aortic valves were slightly thickened; the left side contained a very small coagulum of fibrine; the right side was empty. The pericardium contained about six ounces of serum. Weight, twelve ounces and a half. The spleen was quite pale and soft, and broke down under the finger with the greatest ease; it was much larger than usual. Weight, fourteen ounces and a half. The gall bladder was very large; the texture of the liver itself was firm; there was a small opaque spot on its surface. Weight, three pounds eight ounces and a half. The left kidney was much congested, not generally granular, but here and there, on its surface, were a number of white spots, about the size of a pin's head. Some of these came away with the capsule; others did not, but could be easily turned out with the point of the knife, not being, apparently, adherent to the cortical substance. The right kidney was rather more congested than the left, and also contained many serous cysts. The stomach was healthy; the small intestines were also healthy, excepting here and there patches of ecchymosis. About the middle of the jejunum was a constriction of the gut, which, however, would admit the index finger; there was no thickening or other morbid appearance about the constriction. The ascending and transverse colon were healthy, but small. In the descending colon there were three constrictions, and the mucous membrane at these parts was indurated, and exhibited marks of cicatrisation. At the commencement of the sigmoid flexure was a stricture that would not admit more than a goose quill, and two inches lower down, a similar stricture; the gut was bent upon itself at both. On cutting open the former, three ulcers were observed; one larger, about the size of a small bean, placed longitudinally to the axis of the intestines, and two smaller. Portions of the edges of these had begun to cicatrise, and caused corresponding wrinkling of the mucous membrane. The centre of these gave an appearance as if the mucous, submucous, and muscular tissues had been removed by a punch, the peritoneal investment only remaining entire. The lower constriction presented equally the same general characters, but only the ulcers were smaller and more numerous. Dissection of the penis: About three inches down the urethra, situated posteriorly (in relation to the pendulous state of the organ), was a ragged opening, about an inch long, such as might have been produced if it had been torn by a blunt instrument; this communicated posteriorly with a large abscess that would admit the finger, extending downwards to the bulb, and upwards to the glans; it contained grumous, bloody pus. The posterior wall of the corpus spongiosum was much thinned. On a closer examination, it was found that the corpus spongiosum had been in most parts disintegrated and broken up by the pus, there being no pyaline membrane to circumscribe the latter The membranous portion of the urethra was rather narrower than usual, and several openings, of about the size of large pins' heads, were observed on the floor of it; two especially large, situated one on each side. These, however, were found to be mere sacs, not deeper than a quarter of an inch. On squeezing the prostate, a number of other smaller openings were observed in the same part, giving exit to what appeared to be grumous blood and pus. The left lobe of the prostate was hollowed out into a ragged abscess, about the size of a walnut, and several smaller abscesses seemed to open into it. These abscesses did not communicate directly with the urethra, but opened first in the prostate ducts. The muscular structure of the bladder was hypertrophied; the lining membrane healthy; the uvula unnaturally prominent.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

BY G. J. GUTHRIE, F.R.S., &c.

LECTURE III.

There are few points in surgery on which a greater difference of opinion has taken place, than on the best manner of placing a ligature on an artery, and on the effects which follow its application.

When a round and small ligature is properly applied to an artery of a large size, such as the femoral, the sides of the vessel are brought together in a folded, plaited, or wrinkled manner; the inner and middle coats of the artery are divided, the outer one remains entire and apparently unhurt. If the ligature be removed, an impression or indentation made by it on the outer coat will remain as a mark; and if the artery be slit open in a careful manner, the division of the two inner coats will be obvious. These changes were known to Desault, and are mentioned by Deschamps in his work on the Ligature of Arteries. They were more satisfactorily proved to occur by Dr. Jones, and have been clearly stated by Mr. Hodgson and others. The remaining part of the process differs from the account they have given, and from observations I have had opportunities of making on the living and the dead, is as follows:—The inner and middle coats are not only divided, but the inner one particularly appears to be curled inwards on itself, so that the cut edge of one half or side is not applied to its fellow in the usual way of two surfaces, but by curling inwards meets its opponent on every point of a circle, and in this way forms a barrier inside that of the external coat, which is tied around it by the ligature: so that in fact when a small ligature is firmly tied, its direct pressure is not applied to the inner coats, which have been divided, and have curled away from it, but to the outer one, which is in consequence of that pressure to ulcerate or slough, which processes could scarcely fail to take place also in the other coats, if they were subjected to pressure in a similar manner. The cut edges of the two inner coats, being from this provision of nature perfectly free, are capable of taking on the process of inflammation, which stops at the adhesive stage. This they do by the effusion of lymph or fibrin both within and without, to a greater or less extent, as the case may require. The outer coat of the artery must either yield by ulceration or sloughing, or the ligature must remain until it is decomposed and destroyed. The artery usually yields by sloughing, and the ligature is left at liberty by the ulceration which takes place in the sound part of the artery immediately above and below the part strangulated by the ligature, and which part is frequently brought

in the noose. The artery does not always

by sloughing, particularly if a large one, and the ligature has been thick and soft. In this case, a part of the outer coat, from its folding or plaiting under the ligature, seems to escape that degree of pressure necessary to destroy it, and when the remaining part yields, it remains entire, and is only removed by a subsequent process of ulceration, oc-

tation as an extraneous body. I have had the opportunity and the misfortune of examining great numbers of stumps after amputation and death, and I have seen this occur in so many instances as to leave no doubt of the fact.

In these cases, the external coat could not close around the inner ones; and this shows that they are capable of forming an effectual barrier without it, although it materially assists in giving greater strength to the cicatrix, by the effusion of fibrin which takes place within, without, and around.

Whilst this process is going on without, and at the very extremity of the artery, the vessel is gradually contracted above it, and its coats become more or less inflamed, soft, and vascular. The inner coat is seen to be wrinkled transversely, and a small coagulum of blood is formed within it. This sometimes completely fills the artery, but it is more common for a small tapering coagulum to be formed, adhering by its base to the extremity of the inner coat; the white colour of which renders it distinctly observable, when contrasted either with the coagulum, or the inner coat of the artery, which latter is usually of a red or scarlet colour, whilst the inflammatory action is going on. My observations have led me to believe that a coagulum is not absolutely necessary to the permanent closure of the artery, although it certainly assists in maintaining it. An artery is also supposed to contract gradually up to its first collateral branch; but this is not always the case, and depends entirely on the use for which the branch is required. After amputation at the middle of the arm, the artery will go on diminishing in size up to the subscapular branch; the circumflex arteries diminishing in proportion, in consequence of their being so much less necessary than before the operation. I have seen several instances in which the principal artery has remained pervious below the collateral branch, the next immediately above the part where the ligature has been applied. Neither will the presence of a collateral branch immediately above where the ligature has been placed upon the artery always interfere with the consolidation of the wound, and the closure of the canal of the vessel. It may impede the process, and render it for a time less safe, and in some instances prevent it altogether. I have so often seen large arteries heal after division close to the giving off of a considerable branch, that I consider them to be always capable of doing so, provided they are naturally sound. If they are not sound, it is very doubtful what process may take place; but it will be less likely to be a healthy one, if interfered with by the immediate proximity of a collateral branch. The power which suppresses hemorrhage in a bleeding artery, resides however in the extremity of the vessel itself.

A ligature should always be round and small; provided it be sufficiently strong. The strength of a ligature is variously estimated; some surgeons trying it by the strength of their own fingers, others by what they conceive to be the resisting power of the coats of the artery, in which perhaps they may err. The only way in which a surgeon can hope to acquire correct information on this point, is by trying on the dead body what force of fingers is required to cut the inner coats of arteries of various sizes; and then taking the least force required for this purpose, to ascertain whether he can easily pull the ligature over, or off the divided end of the artery. If a surgeon will take the trouble to do this, he will find that he has estimated the necessary force much too highly, and that he is in more danger by breaking his ligature than of failing to secure the artery. Hemorrhage has however been known to occur from the ligature having slipped off the end of an artery, which had been divided in the operation for aneurism, although I have never seen it happen after amputation, where the vessels were tied with a small firm ligature. It constitutes a valid objection to the division of the artery between the ligatures, when two are applied.

A ligature composed of one strong thread of dentist's silk, well waxed, is sufficiently firm for the largest artery. It does not however much signify what may be the shape, size, form, or substance of ligatures, when they are applied to arteries in a sound state, provided they are not too large, are fairly and separately tied, and with a sufficient degree of force to retain the ligature in its situation until separated by the usual processes of nature, which generally take from fourteen to thirty days for their completion.

When arteries are unhealthy, the selection and proper application of a ligature are points of great importance. A small round ligature should be fairly, evenly, and firmly although not too forcibly applied, without the intervention of any substance whatever between it and the cellular covering of the artery. The secondary hemorrhages, which are recorded by different writers, took place I am disposed to

believe, more from the application of improper ligatures than from any other cause; for the inner coat of an artery is so prone to take on the adhesive state of inflammation, that if a strong small ligature be applied in the manner directed, it is more than probable that the closure of the artery will be effected. Ulceration will however sometimes take place on the inner coat of the vessel, and slowly extend outwards, undoing in its progress any steps which may have been begun for the consolidation of the extremity of the artery. When a secondary hemorrhage does occur from this or any other cause, it is usually from the beginning of the second to the fourth week, but there is no security for the patient until after the ligature has come away, unless it is retained an inordinate length of time from having included some substances which do not readily yield under irritation, such as the extremity of a nerve, or a slip of ligament which is not sufficiently compressed in the noose of the ligature.

Secondary hemorrhage may also take place from the extension of ulceration or sloughing to the artery from the surrounding parts, and perhaps as frequently as from any other cause, but when mortification occurs, there is no secondary hemorrhage, unless in that species which is called hospital gangrene. The advantages to be derived from the application of a strong small ligature, from the least possible disturbance of the surrounding parts, and from absolute quietude, whilst the healing processes are going on, must be so obvious as to require no further observation. Secondary hemorrhage has been shown to be the consequence of motion of the limb at too early a period, and an undue interference with the ligature, by pulling at it, cannot be too earnestly deprecated, as likely to give rise to it in a similar manner.

I omitted to mention in my last lecture a case I had related, which is so similar to Mr Keate's, and which was conducted on such sound principles that it deserves your utmost attention. It is given by Mr Bell, of Great Grimsby, in the Lancet, page 801, vol. xxxi, 18[illegible]0.

Case 32.—A young man of sixteen was wounded on the inner and lower part of the thigh by a pen knife, and lost a considerable quantity of blood, which was restrained by compress and bandage, and the young man was kept in bed for three weeks, when a profuse bleeding took place, which was again suppressed by his bandages. He suffered severe pain during the night, and the next day the formation of a swelling at the wounded part was evident. Three more bleedings took place, the swelling increased so as to occupy two thirds of the inner aspect of the thigh, and exactly one month after the accident it was decided in consultation that the artery should be secured. Mr Bell made an incision between five and six inches long, taking the original wound as a centre, removed all the fluid and coagulated blood, placed a ligature above and then below the opening in the artery, and closed the wound. The young man perfectly recovered, the limb two years afterwards being in no way deteriorated by the injury.

The younger Louis, in his Memoire sur les tumeurs fongueuses de la dure mère, page 3, published in the Memoires de l'Academie de Chirurgie de Paris, says, "Our knowledge, always too limited, is almost necessarily defective when it is not supported by a sufficient number of facts relating to the same object, which should be examined with the most scrupulous attention in all their different bearings." Sensible of the justice of these remarks, they must form my apology for the production of so many nearly similar cases, under the belief that they are essentially necessary for a due understanding of the subject to which they relate. They are all abridged to the utmost, consistently with a due preservation of their sense and meaning.

The brilliant theory of the cure of aneurism by the Hunterian method, and the more brilliant operations which followed it, superseded and almost obliterated from the minds of modern surgeons the recollection of the ancient method of proceeding with respect to wounded arteries. There was not a single surgeon to be found with the army at the first battle in Portugal in 1809, who doubted for an instant the propriety of its application to them, no matter in what school they had been educated, nor in what country they had practised their profession. I partook of the general persuasion which at that time prevailed in England, but was fortunately on the very first occasion at the battle of Roliça led to doubt, and shortly afterwards was convinced not only of its inapplicability but of its inefficiency.

Case 33.—Corporal Carter, of the pioneers of the 29th regiment, was wounded at the battle of Roliça in August, 1809, by a musket-ball, which passed through the anterior and upper part of the forearm, fracturing the ulna. Shortly afterwards a profuse hemorrhage took place, and the staff surgeon in charge tied the brachial artery. In the night the hemorrhage recurred, and the man nearly bled to death. The arm was then amputated, when the ulnar artery was found in an open and sloughing state.

Remarks.—A simple incision to expose the wounded artery and to place two ligatures upon it would have saved this man his arm.

Case 34.—At the battle of Vimiera, which followed a few days afterwards, a soldier received a somewhat similar wound, save that the brachial artery bled forthwith, and was only stopped by the tourniquet. Warned by the preceding case, I cut down on the artery, carefully avoiding the nerve, which had been tied in the former instance, and found the artery more than half divided. It was secured by a ligature above and below the wound, the bleeding did not afterwards return, and the man recovered.

Case 35.—Thomas Carryan, of the 3rd regiment, was wounded at Albuhera, on the 16th May, 1811, on the inside of the calf of the right leg, the ball passing out on the fore and outside of the tibia. It bled considerably for some minutes, when it ceased, and the hemorrhage did not return until the 15th of June, on which day a little blood followed the dressings, and increased on the patient making any exertion; so that, on the 4th, the gentleman under whose care he was, tied the femoral artery on the outside of the sartorius muscle, which suppressed the hemorrhage for that day, the limb continuing with little or no interruption of the same temperature to the hand as the other; on the 5th, the original wound had a bad appearance, and some coagulated blood was readily pressed out of it; on the 6th, a greater quantity came away, and, on the 7th, the exertion of using the bed-pan was followed by a stream of arterial blood, which ceased on tightening the precautionary tourniquet.

The limb was amputated above the ligature on the artery. Its dissection showed the anterior tibial artery to have been destroyed for some distance, and the muscles on the back part of the leg nearly in a gangrenous state. The patient died a few days afterwards.

Remarks.—If an incision had been made on the leg so as to expose the artery, and a ligature had been placed above and below the wound, the man would not have died, as far as surgery was concerned.

Case 36.—A private of the 5th division of infantry received a wound at the battle of Salamanca, from a musket ball, which passed across the back part of the right leg, from above downwards and inwards. It entered about two inches below and behind the head of the fibula, and passed out near the inner edge of the tibia. "There was little blood lost at the time, and it was considered to be a simple wound; eight days after the injury, some blood flowed with the discharge; this increased during the night, and on examining the limb on the morning of the ninth day, it was evidently injected with blood, which flowed of a scarlet colour from both orifices. It being doubtful which vessel was wounded, whether it was the trunk of the popliteal artery, or the posterior tibial or peroneal after its division into these branches, it was thought advisable to place a ligature on the femoral artery about the middle of the thigh, which suppressed the hemorrhage. The case was now shown to me, as one in proof of the incorrectness of the opinion I had a few days before stated, of the impropriety of such an operation being done. The seeming success did not long continue; a hemorrhage again took place from the original wound, and the limb was then amputated. The posterior tibial artery had been injured, and had sloughed. The man died."

Remarks.—A straight incision directly through the back of the calf of the leg of six inches in length, and two ligatures on the artery, would have saved this man's leg and life.

Case 37.—James Murphy, of the 28th regiment, twenty-two years of age, was wounded at the battle of Waterloo by a musket ball, which passed through the thigh below its middle and in the course of the femoral artery, which was not, apparently, wounded at the time; but as the wound began to heal, it gave rise to an aneurismal swelling in the part, for which the usual operation for aneurism above the seat of injury was performed by Staff-surgeon Cole, on the 22nd of July, 1815, two ligatures being placed below the artery, which was divided between them.

On the 11th of August, matter was evidently collecting in the thigh, and on the 13th a counter opening was made at the inferior part of the thigh, in the line of the aneurismal tumour, and over the exit of the ball, and two ounces of a bloody purulent fluid were evacuated; four ounces of blood were lost in the evening from the wound.

25th. This morning, on rising to get out of bed, an arterial hemorrhage took place from the counter opening to the amount of about four ounces; pressure on the thigh by the tourniquet could not stop it, but it was arrested by compress and bandage and the application of cold. The thigh in the evening appeared to be swollen.

26th. The bleeding recurred this morning, but was again arrested by pressure, but the thigh is enlarged and seems injected with blood. Amputation was now determined upon, and performed. The man sunk and died two hours and a half afterwards.

Dissection.—An incision was made in the direction of the aneurismal wound about an inch deep, which exposed the sac, containing a large quantity of coagulated blood of a dark colour, although destitute of fetor; the blood was not confined to the sac, but was extravasated throughout the limb, the quantity altogether being at least one pound and a half. Another incision was made towards the knee, somewhat in the direction of the artery, and upon opening the tumour, which was beneath the fascia, there spouted out three ounces of thin matter of the colour of clay. No communication whatever could be found between this abscess and any other part.

The ball had passed through the rectus, vastus internus, and sartorius muscles, beneath the abscess but higher in the thigh, and immediately over that part of the artery which was diseased, but did not touch it, although it was the cause of disease in the parts around the artery and of the vessel itself, but the injury was not sufficient to bring on immediate hemorrhage. The artery was affected by extension of disease to it, and not by the direct contact of the ball, in the track of which nothing peculiar was observable. It communicated with the counter opening, and with that part where the blood was first effused.

Remarks.—The great error lay in making a new wound, and in tying the femoral artery as for an aneurism, instead of laying open the swelling. If this had been done, the man's leg and life in all probability would have been saved.

The Hunterian theory, the cause of death in these three men, as well as in many others before and since, is founded on the fact that the artery is, and has been for some time, in a diseased state immediately above and below the aneurismal sac—that if the sac were opened, or caused to inflame or to suppurate, the artery could not be safely tied where it was diseased; that it is more likely to be found in a sounder state at some distance from the aneurismal tumour; that the operation is more simple when performed on parts in a healthy and natural state; and that the impetus of the circulation being taken off by the ligature, the blood in the shut sac would become stagnant, and consequently coagulate, and be ultimately absorbed. When the theory is applied to the treatment of a wounded artery, even with a narrow, [illegible] an open wound, the absence of a [illegible] sac [illegible] any regurgitating blood from the collateral or capillary vessels is overlooked, together with the hemorrhage which must necessarily follow from the want of such a retaining membrane, unless the divided ends of the vessel should have been closed by some accidental rather than expected process of nature, before the collateral or capillary circulation could become efficient. The

previous soundness of the artery at the part injured is overlooked; the danger of mortification from a deficient collateral circulation is contemned, and even if the external wound should have closed, which is not commonly the case, the fact of its being a spurious diffused aneurism, without a sufficiently restraining sac, is neglected. The unaccountable and absurd fear of hemorrhage on opening such a sac, after the numerous instances which are recorded proving its unworthiness, is only equalled by the no less strange and more unaccountable fear which still pervades the minds of many surgeons, of cutting through muscular fibres in order to expose an artery. These apprehensions are so truly ludicrous, that it appears to me almost incomprehensible, that they can have been so long entertained by able anatomists and surgeons. Nevertheless, they are the only reasons which can be given for placing a ligature on the internal iliac for a gluteal aneurism following a wound, or indeed on any other artery which has suffered a similar injury.

In order to make the necessity for abandoning all fear of hemorrhage from such aneurismal swellings manifest, and to show how imperative it is that even whole muscles should be divided, if they interfere in the progress of an operation, I shall first take into consideration wounds of the arteries of the hip and of the leg, and of the aneurismal swellings to which they may give rise.

Mr. J. Bell was the first to set the memorable example of dividing a large portion of a muscle to enable him to reach a wounded gluteal artery which he did not think he could attain by any other means. His vivid description of an incision of eight inches long, afterwards said to be enlarged to two feet (in what direction is not stated), the removal of eight pounds of coagulated blood from the sac, the deluge of fresh arterial blood which followed with a loud whizzing noise, after all which the patient recovered, ought to have allayed the apprehensions of the most timid surgeons; and although Mr. J. Bell's dramatic sketch of his leech catcher's case may be somewhat exaggerated, it ought to have made surgeons think more on these points than many appear to have done or even to do; and it should have induced them to perform such operations sooner, when the parts would be less distended, and more readily distinguishable.

This operation has since been done by Dr. Murray in Spain, Messrs. Rogers of the United States, Carmichael of Dublin, and Baroni of Bologna; and as the operations performed by the two last are as simply described as Mr. J. Bell's is fearfully related, I shall give them as shortly as possible.

CASE 38.—Lieutenant Colonel M'Pherson, 92nd regiment, received a wound from a musket-ball on the 13th of December, 1813, which entered a little in front of the trochanter major of the left side, struck the os femoris which flattened it, passed underneath the glutei muscles, along the ilium for about three inches, and lodged in the posterior part of the gluteus maximus, whence it was cut out next day. He continued to go on well and to recover his strength till the 27th of December, when he began to complain of pain and heat deeply seated in the wound, and was a little feverish and restless, for which he took a purgative and opiate at night, but without relief. On the 28th, the parts were observed to be more swollen, the pain was increased, and about noon a sudden and violent hemorrhage ensued from the posterior wound, by which in two or three minutes he lost upwards of two pints of blood. Compression was made on the mouth of the wound for some time, which restrained the flow of blood externally; but it appeared that hemorrhage was still going on internally. A firm hard compress of paper rolled up in a bandage was placed along the course of the posterior part of the wound, and bound tightly on it; the parts were kept very cool with vinegar and water; and gentle manual pressure, by a relief of servants as they became tired, was kept constantly on the pad, with a view to obliterate the artery. In the afternoon, a swelling about the size of an egg in extent, but not so thick, was observed to be forming below the pad, two inches from the orifice of the wound; he had for some time begun to feel a gradual increase of pain from the pressure, and whilst changing his posture in bed, the orderly removed his hand for a moment, when another gush of coagulated and of arterial blood escaped, which weakened but gave him ease.

29th.—The parts were considerably swelled, tense, and of a glassy appearance about the centre of the course of the wound; and some blood forced its way out by the anterior orifice, to which an additional compress was applied. About four o'clock in the morning of the 31st, the pressure having been removed, as he was not able to endure it on account of the dreadful pain it gave him, another profuse hemorrhage took place; which reduced him so much that his extremities became quite cold, his countenance pale and shrunk, and his pulse was hardly to be felt. It was stopped as before. In the course of some hours he recovered his warmth, his pulse rose, he became tolerably hearty again and took some breakfast, but as it was evident that the bleeding was going on internally, at eleven, a.m., the operation for placing a ligature on the wounded vessel was performed by Staff-surgeon Murray. A large mass of coagulated blood forced its way out as soon as the incision was made, and was followed by florid arterial blood. The wound was immediately sponged out, and the pressure of two pads which had been placed on each side of the incision, having been removed a little, two large branches of the gluteal artery which had been cut in the first incision, presented themselves, and were secured. The parts were again cleaned out by a sponge; and in the course of the original wound, a large artery was found close upon the bone, from which all the secondary bleedings had taken place; it was included in a ligature, and all bleeding from that part entirely ceased. Its opposite orifice appeared to have been included in a second ligature, as the needle was passed nearly quite down to the ilium. Two other small muscular branches were afterwards taken up, and the lips of the wound then brought together by slips of sticking plaster, with a compress of lint on each side, and a flannel bandage to support the whole. Although he did not lose above four ounces of blood directly from the arteries by the operation, he became much exhausted before it was finished, and indeed we were not without some fears that he would have sunk during its performance. Fifty drops of laudanum were given to him, and he was left on his bed where the operation was performed. For some time he suffered from that anxious restlessness attendant on exhaustion and extreme debility, and from pain and irritation; but when by rest and a little nourishment the powers of the system began to recover from the shock, the equilibrium of the circulation to be restored, and the opium to exert its influence, he became very composed and easy; his pulse got up; his countenance recovered a degree of vivacity; he said he felt himself much better than before the operation, being more free from pain in the seat of the wound, and his mind was more at ease from the idea of the vessel having been secured; he got a tolerably refreshing sleep of three or four hours, interrupted only at intervals by starting.

January 1st, 1814.—He passed a tolerably easy night, slept at intervals, and took a little nourishment, but had also symptoms of great exhaustion with alternations of chills and flushings, and clammy perspirations, and now and then sickness and hiccough. The parts about the wound were comparatively easy, but hot; there was no oozing of blood; he took a mouthful of toast with a dish of tea to breakfast, was in good spirits, but inclined to doze and sleep much. During the day his appetite failed. Towards evening he began to sink very rapidly, and died at eleven o'clock, p.m.

Remarks.—On examining the state of the parts after death, it was found that no adhesion had taken place. It is evident that the operation ought to have been done in the first instance. The only cause of delay arose from the thickness of the muscular parts to be divided, and the dread which at that period filled the minds of most surgeons upon this subject,—a dread which it is to be hoped will be for the future abandoned.

CASE 39, by Mr. Carmichael.—Master West, aged seventeen, eleven days before my visit received accidentally a wound of a penknife on the right hip, which penetrated as far as the handle would permit it to go. An immediate gush of blood followed, so strong as to dash against the wall of the chamber near to which he was sitting. Three days afterwards the patient imprudently walked down stairs, but had scarcely returned to his room when he felt an acute pain in the hip, followed by an immediate tumefaction, which increased from day to day. The small cicatrix of the wound was situated about half an inch above the presumed situation of the upper margin of the ischiatic notch, where the gluteal artery emerges from the pelvis. No pulsation was evident to the eye, even on the most minute examination, but the strong pulsation of an aneurismal tumour was manifested to the ear, either by immediate or mediate ascultation. It was evident, therefore, that the tumefaction of the hip did not depend upon the presence of matter, notwithstanding the patient had been affected with frequent rigors from the period that the swelling took place, accompanied by a foul tongue and symptomatic fever; but that it was owing to an effusion of blood in consequence of a wound of the trunk of the gluteal artery, or one of its largest branches.

As I had known instances of wounds of large arteries healing under similar circumstances, although the limb was injected with blood, I deemed it right to give this patient a similar chance before recourse was had to operation. I therefore directed ten ounces of blood to be taken from his arm, as the tumour was painful, and the pulse quick and hard. Draughts containing tincture of digitalis were given every sixth hour; a cold lotion was applied to the tumefied parts, and absolute rest in the recumbent position enjoined. This plan, with occasional opiates to meet pain and uneasiness, was persevered in during five days, but no benefit was derived. On the contrary, the tumefaction of the hip and entire limb was obviously increasing, and an operation was necessary. The patient being placed upon a table, lying on his face, I commenced by making an incision five inches in length, beginning an inch below the superior posterior spinous process of the ilium, and about the same distance from the margin of the sacrum, and continued it in a line extending obliquely downwards to the trochanter major. The gluteus maximus and medius were then rapidly divided, or rather their fibres separated (as the incision ran in the direction of the fibres), to the same extent as that of the integuments. The coagulated blood forming the tumour then became apparent through the sac or condensed cellular membrane with which it was covered. This was divided the whole extent of the incision by running a buttoned bistoury quickly along the finger introduced into the sac, and its contents, consisting of from one to two pounds of coagulated blood, were emptied rapidly out with both hands into a soup plate, which it completely filled. A large jet of fresh blood instantly filled the cavity I had emptied; but the precise spot from whence it came being perceived, I was enabled by pressure with the finger, to prevent any further effusion, while that which had been just poured out was removed by the sponge. It was obviously the trunk of the gluteal artery, just as it debouches from the ischiatic notch, which had been wounded. I endeavoured, but in vain, to secure the artery by means of the tenaculum. I had then recourse to a common needle of large size, and with this instrument was immediately successful in passing a ligature around the bleeding vessel, and in preventing all farther hemorrhage. After having waited some little time to ascertain if the artery was perfectly secured, lint was introduced to the bottom of the wound, as it was not likely that union by the first intention would take place between the walls of the extensive cavity which contained the coagulated blood. The patient was then put to bed, and an anodyne given to him. Everything went on favourably after the operation. On the third day the external dressings were removed; on the fourth the greater part of the lint with which the wound was filled came away, followed by a flow of matter of a good quality. On the sixth the ligature came away as well as the remainder of the lint. From this period the matter continued daily to diminish, and the patient recovered.

CASE 40.—Professor Baroni, of Bologna, was called to a young man who was wounded in the right hip by a fall from a tree on his own pruning hook, which divided the glutei muscles, laying bare the sacro-sciatic ligaments and the bone. The

edges of the wound united, but an abscess formed, requiring to be evacuated. The fourteenth day after the accident two most serious hemorrhages took place, which were restrained by compression. The wound being laid open, and the coagula removed, a jet of arterial blood marked the situation of the gluteal artery, the upper end of which was tied by the professor; but as the bleeding continued from the opposite end, a ligature was also placed on it, and the man recovered in a month.—*Gazette Médicale*, p. 695, 1835.

Remarks.—These cases are quite decisive as to the practice which ought to be pursued in wounds of the gluteal or of the sciatic arteries, or in aneurismal tumours, the consequence of wounds, in preference to placing the ligature on the internal iliac artery, as in a case of aneurism formed from disease of the coats of the vessel, to which operation, in such cases, the only real objections are, that the patient is likely to suffer from peritoneal inflammation, and that the operation is one of some difficulty, requiring a great degree of dexterity, and of anatomical knowledge.

Clinical Lecture,

BY DR. CORRIGAN,*

Delivered at the Whitworth, Hardwicke and Richmond Hospitals, Dublin.

Peritonitis—Fœcal Vomiting—Obstinate Constipation without Mechanical Obstruction—Explanation of Treatment, and Clinical Observations.

The case which I am about to read to you, Gentlemen, involves some points in practice which are still the subject of difference of opinion amongst the profession—I allude to the treatment of peritonitis.

Patrick Carroll, aged thirty-five, admitted on the 8th of March; had enjoyed very good health, with the exception of occasional wandering pains in the abdomen, until the night of the 27th of February, when, while sitting at dinner, he was suddenly seized with excruciating pain in the right lumbar region. To this succeeded shortly, abdominal tenderness, greatest in the pelvic region; the pulse became quick; he complained of thirst; the bowels were constipated, and the abdomen somewhat tympanitic. For these symptoms he had been attended previous to admission by Mr. Gorman, under whose care he was treated in the following manner:—

"He was bled to the amount of sixteen ounces, and put under mercury in the proportion of a grain every second hour; this was on the 27th of February, and the effect of the treatment was, that on the 1st of March the bowels were freely moved, the patient appearing to be very much better; the abdomen was ordered to be fomented, and the pills to be continued." This, you observe, was in three days after the commencement of the attack, at which time the man was very considerably better. "On the 2nd of March the improvement still continued, but at night all the pain of the abdomen returned with great severity, the surface was exceedingly sensible to pressure, the slightest touch being productive of extreme torture, and the tenderness being forced to extend all over the right iliac and lumbar regions. He was cupped over the painful parts, and several ounces of blood extracted, and the pills ordered to be continued. On the 3rd of March it appears this relapse had subsided, the mercury having slightly affected the mouth; the abdominal pain and tenderness were much relieved, the tympanitis, however, still remained, and an oil draught was ordered. On the 4th the gums were very sore, and the pain and tenderness completely gone. This was on the seventh day after the commencement of the attack, and the man expressed himself greatly relieved, so much, that his own expression was, he did not care if his belly were pressed down to the bone. He was at this time ordered a whiskey gargle for his mouth, with which he regaled himself by drinking in the course of the day, and the pain and tenderness became nearly as severe as ever in the evening."

Here, you observe, were two relapses of peritonitis within seven days, the first being most likely attributable to the same cause as the second, though no trace of this patient having similarly indulged himself was discovered. The mercurial pills were continued, and leeches applied to the abdomen, and on the 5th and 6th he was so much better, that the medicines were ordered to be discontinued. On the 7th the right iliac region was observed to be swollen, together with considerable pain on pressure; for this leeches were applied, and on the 8th he was admitted to the Whitworth Hospital. When first seen he rested in bed on his knees and elbows, groaning loudly, and apparently in great agony, and it was with much difficulty that he could be persuaded to turn on his back for the purpose of examining the abdomen.

The principal source of distress was referred to the pelvic region; at the lower and right side of the abdomen the tenderness was very great, and extended up on that side as far as the liver.

As the patient lay in bed, the abdomen seen in profile presented a waving outline, whose convexity rose to the height of several inches in the umbilical and pelvic region, while the line extending from the umbilical to the ensiform cartilage was hollowed. The respiration was now accelerated; pulse 120, slightly compressible; bowels constipated. He stated that he had not passed urine for some hours, but it was drawn off without difficulty. The head and upper part of the chest were covered with cold clammy perspiration. Leeches were applied to the abdomen, and two grains of mercury with a quarter of a grain of opium given every third hour.

On the 9th he felt better; the pain was gone, but the tenderness on pressure still remained; there had been some slight evacuation of fæcal matter. On pressing over the right iliac region, an elastic tumour was perceptible, and, on pressing more deeply, a small tumour, solid to the hand, was felt; an enema with the long tube was administered; vomiting of fæcal matter set in, but nothing passed from the intestines. The fæcal vomiting continued unchecked, as also the other symptoms, and the patient gradually sunk and died on the 14th.

Treatment.—He was leeched on the 9th inst., the pills of mercury and opium continued, and blisters dressed with mercurial ointment applied over the abdomen, and opium, in small doses, viz., gutt. xv. of vin opii was given every three hours; and brandy was administered.

I wish now to turn your attention to some points connected with the dissection. Cases like that before you being very likely to present themselves in practice, which, in the suddenness of their occurrence, naturally excite great sympathy and alarm. On turning aside the abdominal flaps and looking to the pelvic region, all the small intestines lying in it were seen coated with lymph, and a quantity of plastic lymph lay through them in all directions, moulding itself through their interstices; the viscera, as they lay in situ, both in the true and false pelvis, being covered with layers of the same lymph. Passing to the right iliac region, the cæcum was observed to be distended with air, and covered also with layers of lymph, which were in some portions from a quarter to half an inch thick, and in the flexures between the ileum and caput coli was a deposition of lymph, so thick as to form the solid tumour that had been felt during life. The cæcum was adherent by a very thick layer of lymph to the peritoneum, in raising off which numerous bloody dots were observable. As the viscera were traced up along the right side as high as the liver, they were found covered with lymph mixed with sero-purulent fluid. The pelvic intestines, it should be remarked, were also slightly distended; I would here draw your attention to the line of demarcation which bounded these pathological conditions. As the large intestine was traced up from the cæcum, it was found, after a few inches, to lose all trace of inflammatory action, and all the ascending, transverse, and descending portions of the colon were equally free from it. The sigmoid flexure was in a similarly healthy state; but the rectum was covered with the same lymphy layer which invested the small intestines. You are to observe, that the stomach, left lobe of the liver, the duodenum, and jejunum were all perfectly free; in fact, that all the regions constituting the left half of the abdomen down to the false pelvis were free from any lymphy deposition whatsoever; or, taking the opposite view, we find that the whole of the right side, commencing from the stomach and including the right lobe of the liver down to the ileo-cœcal valve, presented the diseased conditions just alluded to. The mucous membrane throughout the whole intestinal track, with the exception of the rectum, was perfectly healthy, not alone in the upper portion of it but even in that part of the ileum and colon in which lymph had been shed to nearly the depth of an inch. It had not the slightest appearance of disease.

Round the outside of the caput coli, into which the ileum projects, there was the deposition of lymph already described, but no mechanical obstruction whatever existed. The disease might in the first instance have been, and probably was, an attack of intussusception of the ileo-cœcal valve into the caput coli, but all trace of this had disappeared. There was, as I have just said, no mechanical obstruction whatever, in proof of which, observe this important fact, that there was a quantity of healthy fæcal matter, of a pasty consistence, not only in the ileum, but a considerable amount of the same material scattered along the course of the colon. If, at the point of projection of the ileum into the cæcum, inflammation ever had gone far there was yet no disease produced, and the deposition of lymph around the cæcum, though communicating to the finger a solid feeling when pressed deeply, had not been productive of any obstruction. Yet the patient had iliac vomiting and obstinate constipation. It is at the point of projection of the ileum, you are aware, that intussusception most frequently takes place, and, probably, irritation at that point gave rise to the peritoneal inflammation; however, he was, on the fifth day of his illness, free from all uneasiness; could bear pressure down to the back bone, when on that day, the 4th of March, drinking whiskey caused a relapse.

Let us now seek for an explanation of the symptoms presented during life. The parietes over the diseased parts felt tense and as if distended by something beneath. The muscles ceased to exert their contractile action over the inflamed viscera of the abdomen: nature, as it were, endeavoured to relieve the parts from pressure. This was very remarkable in this case, when the parietes covering the pelvic and right iliac regions were examined, and was particularly well illustrated in a case of peritonitis admitted to the Hardwicke Hospital some days since, in which, on feeling the right side, where the disease was, the sensation communicated to the hand was as if distended intestines were felt through a fold of inelastic cloth.

We come now to the consideration of particular points, and first let us inquire what the cause of the constipation is in the disease before us, and what its treatment. But, digressing just for a moment, I would remind you of what I said about this man having got a relapse from not having given himself fair play. For it illustrates an occurence very frequent in practice. It often happens that persons just after recovery, subject themselves to relapses from the imprudent use of stimulants, excesses in food, or taking purgatives; nothing is more common than for a return of the disease to prove fatal, under circumstances of this kind merely exciting the peristaltic motion of the intestines will prove sufficient, just upon the same principle, that a man lately recovered from an attack of pleuritis would, by exercising the intercostal muscles in blowing a wind instrument, produce a return of the disease. Anything, in fine, that will produce excited action, or cause an attrition of the serous surfaces against each other, may give rise to a relapse. Motion should be avoided, here, in fact, with as much care as in an inflamed joint. But to return to the question of constipation and iliac vomiting—what gave rise to the obstinate constipation, and what is the treatment proper for you to adopt, suppose a similar case presents itself.

The ideas entertained about constipation, previously to the publication of Abercrombie's work, were

* We have to apologise to Dr. Corrigan, as well as to our numerous readers, for the long period during which we have been compelled to postpone the [illegible] lecture. It has been in type fully one [illegible], and has been delayed only in consequence of the great length of Mr. Guthrie's lectures, which [illegible] publish as they are delivered.

associated with the existence, merely, of obstruction in the intestinal canal, in the removal of which the recovery from an attack of peritonitis was sought for. At a time when post-mortem examinations were not as frequent, or as carefully attended to, as they now are, such an inference naturally suggested itself at first sight, and it was consequently deemed expedient to purge and procure free evacuations; but we now know that violent peritonitis is very often connected with a free discharge from the bowels. To Abercrombie and others we are indebted for the knowledge of the fact, first strikingly brought forward by the former, that obstinate constipation may be present without any mechanical obstruction whatever, and that this is not the less true, whether peritonitis be or be not present.

A question which naturally suggests itself to us is, whether does the constipation in these cases and so strongly marked in the case before us, exist as cause or effect?—for upon this, our treatment depends. Now, when upon the most careful examination of the whole canal, we find its upper portion, including the stomach, duodenum and jejunum, all healthy with the exception of some slight distention with air; when we find the ileum filled with pasty fæcal matter, and the same in the cœcum and remainder of the colon, and that neither by injection or any other means did the intestine act, or any portion of the contents of these several divisions of it, advance along the tube in the slightest degree, though no obstruction existed; viewing, I say, this one case alone, even without the information given us by Abercrombie, we must inevitably come to the conclusion, that the case is purely one of peritonitis, and that the peritonitis is the cause of the obstinate constipation. Recollect that all the intestines in the pelvis were covered with plastic lymph, that the cœcum was in a similar condition. Coupling, therefore, all the facts above detailed, you cannot, I think, come to any other conclusion, than that the case before you was one of peritonitis engaging the whole of the small intestines, which inflammation acting on the muscular tissue in contact with the inflamed serous membrane, interfered with the peristaltic action of the affected portion of the intestinal canal, which was thereby rendered unable to pass its contents onwards. To this circumstance is the fæcal vomiting to be attributed, and the constipation likewise. We know it to be a fact in pathological physiology, that there is an instinctive effort to keep at rest an inflamed part; you see it, as I before said, in the intercostal muscles; in pleuritis you see it in an inflamed joint. If then, you come to the conclusion I have advocated and I think that uniting reason with the facts detailed, you can draw no other practical inference—it follows that your treatment is not to be directed to efforts for overcoming constipation by the administration of acrid purgatives.

Relieve the serous inflammation, and permit the peristaltic action of the intestines to return, but do not force it; look upon the constipation as effect, not as cause. Taking the case in another point of view, of what harm is the presence of pasty fæcal matter in the intestine productive? We know it to be unirritating in its effects in the bowels of the child; surely it cannot, then, be the cause of such mighty mischief as to require removal by the administration of croton oil and such like drastic purgatives. Let the first object be, therefore, to look upon inflammation as the cause of the constipation in peritonitis, and to endeavour to remove it by the application of leeches, by blistering, and putting your patient under the influence of mercury; and recollect what I told you of the danger of a relapse from the use of stimulants of any kind. While we lay down these principles as our guide in treatment, it is not necessary—if I may use a vulgar phrase—to ride a hobby. Where accumulations occur in the colon, their removal may be advantageously obtained by the introduction once or twice of the long tube, as recommended by Dr. O'Beirne; but it is worse than useless to repeat this process after, and so attempt to force a discharge of the contents of the intestine. Suppose a man labouring under pleurisy opened, what would you think of the person who would force the intercostal muscles of the affected side into action, and cause a rubbing together of the two sides of the inflamed membrane? Again, fancy the abdomen of a patient, affected with peritonitis, exposed to your view, with the cœcum and small intestines intensely inflamed, and that while nature was doing her best to keep these parts in a state of rest, croton oil was thrown into the intestinal tube by one inlet and stimulant injections through another. Surely such would be an error of practice perceptible to the commonest capacity. Pay no attention, then, to the unirritating pasty fæcal matter lying in the intestines beyond the injection recommended above, but direct all your faculties to the subduing the existing inflammation by leeches, bleeding, blistering, and the administration of mercury. I could relate to you several cases in which this plan was attended with the best success where the purgative plan had previously been ineffectual and injurious; but I find I have already gone my hour.

The Structure and Functions of the Brain,

WITH NEW VIEWS ON

THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine, formerly Physician to the Bicêtre and Salpetrière Asylums, Author of the "Traité Médico-Philosophique sur l'Aliénation Mentale," "Medicine Clinique," "Nosographie Philosophique," &c. &c. Translated, with Notes, illustrative of some important Doctrines in Physiology, Phrenology and Moral Education,

BY DR. COSTELLO,
Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

From the preceding cases of general paralysis, or, to speak more strictly, of paralytic cerebritis, which exhibit the disease in its various forms, we may now proceed to make a few reflections on its general anatomy, symptoms, seat, and treatment.

When its progress is the most rapid, it is characterised by an inflammatory turgescence of the whole periphery of the brain, more particularly of the grey substance; the corpora striata share also in the inflammation, and even the whole substance is highly congested, though for too short a time to allow of the disorganisation becoming perceptible.

In the chronic form, which is the most common, the same alterations are found, but of a more decided character; the grey substance softened, ecchymosed, peeling off with the membranes to which it adheres in many cases, presents erosions, mottlings of colour, general thickening, and slight layers of albuminous exudation; the white substance is also altered, being bluish, soft, sometimes ecchymosed, yellowish, and no longer presenting the fibrous character of health. All these alterations are found in the atrophy of the brain, and this atrophy depends obviously on the chronic inflammation of the cerebral pulp, and differs widely from senile atrophy, or from that which results from hæmorrhage. In the latter cases the void is filled by serum, by a cyst, or by false membranes containing the remains of the unabsorbed blood. In the atrophy arising from paralytic cerebritis, the convolutions shrink, and seem flattened against each other, and the anfractuosities disappear, the cerebral hemisphere is considerably reduced, there is a void between the skull and brain, and the membranes are collapsed upon it.

This atrophy pervades the whole of the convolutions, or only a few, but is observed in the frontal, middle, and posterior regions.

The hypertrophy of the white substance must be regarded in paralytic cerebritis as an inflammatory turgescence, which augments the density, as well as the bulk, of all its parts; it seems to develop itself from the basis towards the periphery by a gradual extension until it finally forces and flattens the convolutions against the skull. Blood-vessels can no longer be discovered in it, and the induration extends at last to the annular protuberance. These lesions are frequent in a chronic form amongst epileptics.

Symptoms.—Whatever the cerebral alteration may be, the first symptoms are a general difficulty of speech and deglutition, slight disturbance of the ideas, generally partaking of the character of exaggeration. Such usually is the beginning of paralytic cerebritis, to which the medical man should give his best attention, and which will enable him to prognosticate a mortal malady in a person who still seems full of strength and health. In a little time feebleness of the lower extremities, alternating with evanescent exaltation of their movements, is observed.

The second stage is characterised by the greatest intensity of the symptoms; the paralysis extends to the upper limbs, the patient can no longer use his arms, or he clutches convulsively whatever he tries to hold in his hands; the general sensibility grows obtuse, the excretions involuntary, and at last the muscles of the intestinal canal itself become involved.

The third stage is marked by the aggravation of all these symptoms, by the commencement of marasm, and the formation of gangrenous eschars. Sensibility and intellect are almost abolished, contraction of the limbs and partial convulsions supervene, with complications in the thoracic or abdominal organs, and the patients expire in the most advanced state of marasm; but it often happens that they are carried off by some sudden congestion in the second stage of the disease.

Seat.—General paralysis being charcterised by a lesion of motility, in strict reasoning, we must look for its seat in the motory nervous centres and fasciculi, and as these motory fasciculi are expanded throughout a large portion of the hemispheres, this arrangement would of itself suffice to explain the influence of the cerebral alterations above described on the production of the phenomena of paralysis. But in this disease there are other peculiar lesions of motility that demand a more rigorous explanation. It is observed that the first that manifest symptoms of paralysis are the muscles of the tongue, pharynx, œsophagus, diaphragm, and the sphincter of the anus and bladder, and that it is only after these that the inferior extremities first, and then the superior, are involved. We entertain no doubt that this disease begins with lesion of the corpora olivaria, or of the nervous fasciculi proceeding from them; or if the disease begins in the periphery of the brain, that it must involve some fasciculus, or some nervous tract in connection with those bodies. We have a right to suppose that, from their singular conformation, the nucleus of grey substance that forms their centres, their development in man alone, the corpora olivaria whose functions are still a problem, must preside over some faculty peculiar to man, such as the articulation of laryngeal sounds, the emission of the voice; and that, moreover, the nerves of the pharynx, larynx, and tongue arise from the olivary fasciculi, and that it is the lesion of those organs that specially reveals the general paralysis; that the facial nerve also arises from the same source, and that the trembling of the lips and checks of the paralytic are also very remarkable; that, according to Bell, the olivary fasciculi are destined for respiration, as the pneumogastric derives its source chiefly from them; that we remark in these patients inertness of the diaphragm, slow respiration, an asphyxiating languor of certain inspirations, and slowness of the heart's pulsations; that the lesion of the pneumogastric nerve would account for all these symptoms as well as for the paralysis of the sphincters of the anus and bladder.

The identity of seat in such varied alterations as we find not only in cerebral paralysis, but in epilepsy, and other nervous affections of the intellect, sensibility, and motility, cannot be accounted for in sound cerebral physiology, by any other means than that of a constant lesion of some nervous tract, fasciculus, or centre, specially destined to intellectual, motory, or sensitive functions.

But as those tracts, fasciculi, and centres are found expanded throughout the totality of the cerebral hemispheres by means of planes of fibres, whose direction, relations, and connections are still a subject of uncertainty even for the anatomist, it follows that the cerebral mass, which is the special organ of the intellectual and moral acts, becomes by its very structure the seat of the lesions in all their variety of the motory and sensitive functions. Hence it follows, also, that its alterations, however slight, or however profound,

will give rise to phenomena in which the intellect, motility, and sensibility will be disturbed singly, or altogether, chronically or acutely, according as the lesion involves more or less particularly one or more of those fibrous plans, or as the progress of the affection is more or less rapid.

In general paralysis, the pathological anatomy of which embraces that of all the other diseases of the brain, the identity of symptoms proceeds necessarily from the constant lesion of the fibres, or tracts which are connected with the corpora olivaria, whatever besides be the portion of the hemispheres that may be attacked. We believe that, when the paralysis precedes the disorder of the intellect, the disease begins directly in the olivaria, and, on the other hand, when it begins by demency, that the alteration extends from the brain to the motory tracts in connection with the olivaria, and that it is then we have the symptoms of general paralysis first manifested.

For the rest, the alterations of the corpora olivaria are as well characterised as those of the nervous centres, only the examination of them is wholly neglected in autopsies, and possibly even on account of the difficulty of appreciating them. Some observers, amongst others Guislain and Esquirol, have noticed their state of induration in epileptics. In general paralysis their appearance and size are constantly in relation to the appearance and size of the white and grey substances of the brain. In the atrophy of the cerebral convolutions we find scarcely any vestige of grey substance in the olivaria. In hypertrophy their yellow bands are thickened and swollen, and their prominence is more or less knotted and firm. We entertain no doubt that, in the stutterers and the dumb from birth, the olivaria moreover offer alterations still more characterised.

Treatment.—We have tried, for the cure of this disease, everything that a tolerably intimate knowledge of its nature, and a sincere wish to be useful, could suggest; blisters on the head, cold affusions prolonged for a considerable time, blisters to the neck, setons to the nucha and along the spine: externally, we have employed all known derivatives; internally, all the medicines reputed anti-paralytic; drastics, which we think highly dangerous; tonics combined with antispasmodics; yet we cannot affirm that any of these means produced a satisfactory effect. True it is that some intervals of amendment, some moments when the symptoms seemed to be stopped or to improve, have been observed; but soon again the disease gained ground with renewed intensity. What are we to do against a chronic inflammation that slowly disorganises the convolutions, that then penetrates deeply into the interior of each cerebral lobe, and that is shielded from any direct action by the protection of the skull itself? What are we to attempt against a medullary hypertrophy progressing acutely, and in which the activity of increase seems to arise from the superabundance of the capillary circulation? What against those sudden and repeated congestions which, in a few moments, asphyxiates the little that remains of healthy brain, carrying off these paralytics as if they were struck with lightning? Take blood from them, and they die of a decomposition rendered only still more rapid; produce a derivative action on the bowels, and they perish from enteritis, the effects of which cannot be arrested. At certain stages of the disease even sinapisms give rise to gangrenous eschars on the places they are applied to.

One fact is very striking in the amidst of these incertitudes, namely, that patients attacked with general paralysis, who are nursed at home, and who have the means of obtaining constant attention, changing their linen and bedding as often as it may be necessary, live much longer than those who are crowded together in hospitals. In this respect the ground floor wards of the Paris hospitals are the worst of those establishments; the wards in particular in which paralytics in an advanced stage of the disease are placed have a typhoid and cadaverous aspect, which soon shows itself on their half-disorganised bodies, and this case is so far instructive in showing that hygienic attentions form the chief part of the treatment. The point most important and most urgent is to place each patient in a well-aired room; to have his linen changed whenever it becomes wetted or soiled; to prevent his being long confined to one position, either in bed or chair; to make him walk now and then; and keep him continually clean.

As to the direct treatment, two principal indications are offered—to unload the brain on the one hand, and to support the patient's strength on the other. The best means to secure the first we have found in the application of scarification and cupping on the nucha every day for months, taking care each time to take but little blood, at most half a spoonful, while the food should be tonic and substantial. Although these indications seem contradictory, experience has shown the good effects of the practice, especially in private practice, when we have been called in the early stage of the disease. We have always found bleedings, abstinence, and a debilitating regimen, to accelerate the progress and aggravate the symptoms. It must not be inferred that all the other means usually employed are to be rejected; they ought to be varied to meet particular indications. We only mean to point out those which seem to have produced the best effect.

As to the causes of paralytic cerebritis, we have only ascertained three of them with any degree of certainty, the first is the abuse of alcoholic liquors, next grief and distress, and lastly hereditary predisposition, which represents alone all the causes in this disease, as well as in all others.

II.

HEMIPLEGIC AND PARAPLEGIC PARALYSIS.

In our view paralysis is a symptom of a lesion more or less profound of some nerve or fasciculus, of some centre of the cerebro-spinal apparatus; it consists in the diminution or complete abolition of motion and sensation in the limbs, or in certain parts of the body; it is complete when both are abolished at the same time, and incomplete only when one of these properties is affected.

There are, however, some remarkable instances of muscular paralysis, in which the sensibility acquires an extreme degree of susceptibility; in such cases it may be supposed that the motory cords are already disorganised, while the sensitive cords are still in the stage of irritative exaltation.

It has been said that certain substances, absorbed into the economy, have the property of determining paralysis, such as lead and its preparations, the effect of which is to abolish motility in the lower limbs. Their action is characterised by a soporous state, weight in the head, and headach, from which it might be supposed that these preparations cause congestion of certain parts of the brain for the time, instead of acting directly on the muscular fibre of the limbs. The paralysis may affect a single region, a few muscles, or only one muscle; the functional lesion is always relative to the material and determining lesion; strabismus, the paralysis of the eyelids, of the muscles of the face, of a limb, or of a few fingers only, are those most frequently met with singly. Hemiplegia, or the paralysis of half the body, is the most frequent of all; paraplegia, the paralysis confined to the lower extremities, is the more rare.

The treatment of paralysis rests wholly on that of the organic causes that gives rise to it. The reader will refer to those causes, the most serious of which are apoplexy, inflammatory or senile softening, congestion of the brain, and all acute or chronic inflammations of the brain.

III.

DELIRIUM TREMENS.—ALCOHOLIC DELIRIUM.

In the disease so well described by Rayer under the name of delirium tremens, we have not only disorder of the intellect, but also of the motility. In our view this affection is but the first stage of what we have observed in general paralysis, only that its determining cause being alcohol, the symptoms disappear as soon as the patients are put on abstinence and proper treatment. On this point I have only to repeat that the most frequent cause of general paralysis is the abuse of alcoholic liquors; persons in a furious state are often brought to Bicêtre, presenting the symptoms of general paralysis from habitual excess in drinking; they soon get well again, while others pass into the state of confirmed general paralysis. And thus alcoholic delirium is the most fatal predisposition to paralytic cerebritis.

Another species of paralysis may be observed at the Salpêtrière in young women who have undergone mercurial treatment several times—a kind of mercurial delirium or paralysis. In large doses mercury disorganises the brain, and produces all the symptoms that announce the beginning of general paralysis and of alcoholic delirium. I have seen several fatal examples of this kind.

Alcoholic delirium, the madness of drunkards, always arises from the habitual and prolonged abuse of spirituous drinks, and is characterised by disorder of the intellect, embarrassment of speech, sleeplessness, and trembling of the limbs. This affection supervenes almost always suddenly in the midst of health: the patients are attacked with an intense delirium, which does not completely overthrow the intellectual faculties; the delirium is at one time hilarious, affectionate, and loquacious; at another furious, with vociferations, shouts, and invectives. With the delirium we have usually trembling of the upper limbs, sudden shocks in the arms and wrists, flushing and injection of the face and eyes. The duration of the attack is generally short, and its termination favourable; but when the cerebral congestion is very great, coma, and sometimes a true inflammation of the brain, supervene.

The treatment is simple, consisting in the administration of opium; the emission of blood is injurious in the first stage, and must not be had recourse to unless imperatively demanded by the violence of the congestion. Andral gives 100 drops of the laudanum of Rousseau in the space of an hour; under the influence of this dose the patient falls into a profound sleep for ten or twelve hours, and awakes in perfect health. The form under which opium is administered, however, is not of much importance, being equally successful almost in whatever mode it is administered.

IV.

TREMBLING.

Trembling of the limbs, whether local or general, is a lesion of motility we often meet with; in old people, it frequently depends on atrophy of the posterior convolutions of the brain: in the young it may arise from masturbation, vivid emotion, anger, or fright. It has been observed to arise from abuse of coffee, tea, or opium, or from mercurial vapour, or from preparations of lead.

The trembling may be confined to the head, an arm, a hand, and may occur while the person is at rest or in motion, periodically or continuously.

The most frequent seat of the continuous chronic trembling must also be in the roots of the motory nerves corresponding to the limbs; and hence we must act on the vertebral column by means of derivatives, the action of which should be gradually increased. In mercurial trembling, milk diet, tepid baths, purgatives, and sudorifics, with vapour baths, are prescribed. Sulphurous baths have also been found useful in nervous trembling.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE X.

LICHEN ET STROPHULUS.

According to Willan, and others.

GENERA.	SPECIES.
Lichen.	L. Simplex Pilaris Circumscriptus Agrius Lividus Tropicus Urticatus
Strophulus	S. Intertinctus Albidus Confertus. Volaticus Candidus

As proposed by Startin.

GENERA AND SPECIES.	DIVISIONS.	VARIETIES.
LICHEN ET STROPHULUS.		
L. Simplex vel papulatus		
Agrius	Localis.	Sparsus.
Lividus		Confertus.
Urticatus		Circumscriptus
Tropicus	Generalis.	Inveteratus
Infantilis vel strophulus		

To a disease of the skin closely approximating in its more advanced stages to eczema, when about to become chronic, Willan has given the name of lichen. This careful writer, however, has considered the disease named by him lichen to be entirely confined to adults, in order that it might not be confounded with the disease occurring in infants and young persons, which he has named strophulus—a circumstance that otherwise would have been of constant occurrence, as the maladies are undoubtedly identical; the different vascularity of the skin in the two ages being sufficient to account for any variations which exist in their appearance.

In consequence of this discrepancy, several writers, who have followed Willan, have changed or modified the definition "lichen." Yet, with a few exceptions (that of Rayer in his Traité Theorique et Pratique des Mal. de la Peau. vol i, p. 360, being the most decided), they have not united lichen and strophulus under one description I must, therefore, beg, you will consider that the next in the series for our consideration, or that known as strophulus, is comprehended in the description, and forms the variety I have ventured to name lichen infantilis. I shall follow the definition of Rayer rather than that of Willan, who in all former instances has furnished the groundwork of the characteristics I have given to the affections brought before you.

Lichen may be defined to consist in a non-contagious inflammation of the skin (the papillæ being chiefly affected), often attended by constitutional disturbance, and manifested by a simultaneous or successive eruption of deep red, or flesh-coloured pimples (papillæ), which may appear scattered or in groups, on one region, or over the entire surface of the body. These papillæ contain neither lymph, nor pus, effused in a circumscribed cavity, but terminate naturally, or, from the irritation and friction to which they are subjected, in a furfuraceous desquamation; or more rarely by troublesome superficial excoriations, imperfectly covered with thin crusts, which the microscope determines to be composed of lymph and blood discs, very irregularly intermixed.

Lichen was divided by Willan into five varieties, to which Bateman added two others, viz., L. simplex, L. pilaris, L. circumscriptus, L. agrius, L. lividus, L. tropicus, L. urticatus. These seven species are named either from arrangement, colour, severity, or the influence of climate on the eruption, with the exception of the last, which is a complication with urticaria. This is so frequent an occurrence in lichen that I have considered it one of the usual forms in which the disease is manifested, You observe by this tabular chart, that I have dealt with lichen as with the affections hitherto considered. by arranging it under certain species, which, in compliance with already created nomenclature, are termed, L. papulatus vel simplex, L. agrius, L. infantilis vel strophulus, L. lividus, L. urticatus, and L. tropicus, whilst the divisions of the disease are local and general, and the forms consist of sparsus, confertus, pilaris, circumscriptus, and inveteratus.

There is, perhaps, no chronic disease of the skin which is so frequently preceded or attended by the constitutional symptoms of fever and irritation in the chylopoietic viscera as lichen. A familiar example of this is to be found in the infantile process of dentition, which is constantly attended with a lichenous eruption, commonly known as the red gum, the strophulus of Willan, and L. infantilis of this lecture.

Lichen occasionally appears without any indisti on, and shows itself for the most part amongst the poor and ill fed. All ranks, ages, and conditions, however, are subject to its attacks; and under the designation of prickly heat, L. tropicus, few inhabitants of northern countries can reside for any time in tropical climates without experiencing its attacks, as I myself can testify, having in one instance, at Cette, in the South of France, been visited by it for a short period. At first I mistook the papules for mosquito bites, but soon found from my friend, Dr. Daniel, resident there, that it was a well-known torment in that locality. In my case it arose from bathing in the sun on the shores of the Mediterranean, where as much as one to two hundred yards of shoal water must be passed before you can reach a swimming depth. The size of the pimples in lichen does not exceed that of a large pin's-head; they are mostly, however, more conical in shape, and, as mentioned in the definition I have given you, contain neither pus or serum, their consistence being solid, and their colour redder than the healthy integument. When the epidermis covering these papulæ is abraded, or they are opened with a sharp instrument, a little bloody serum exudes, which does not escape from a cavity, but from the torn or divided vessels of the part. The duration of each pimple is not commonly more than a week or ten days, but others constantly appear, so that the complaint may last for months, or years; atmospheric change, errors in diet, constitutional derangements, or mental disquietudes, for the most part materially influence the severity of this eruption, whilst they more or less modify its form, whether it be papular, livid, or joined with nettle rash; it may be well, however, to give a brief description of each species before proceeding to point out the divisions and forms of the complaint. The symptoms I have hitherto detailed refer almost exclusively to the simple or papular form, of which the next species, L. agrius, is but a chronic variety, which may, perhaps, be better considered under the form inveteratus. The next two species, L. lividus and L. urticatus, are in reality complications of lichen, with other diseases of the skin, the former being in combination with purpura, the latter with urticaria; thus, L. lividus, in addition to the symptoms characterising L. simplex before detailed, is more or less attended with petechiæ intermingled with papulæ, presenting a deep red, or livid hue, the arms and legs being the regions most commonly affected, though in protracted cases the complaint extends to the other parts of the body. This eruption is most frequent in sickly persons. It is a very rare affection, and I have not seen it more than three or four times amongst the patients attending this institution, which would make it occur about once in 1800 cases of skin disease. The lichen urticatus is a comparatively common form of the complaint, and usually manifests itself after some constitutional irritation; it is most common in children, and then perfectly answers to Willan's definition of strophulus candidus. The pimples constituting this lichen are more irregular in form than those of L. simplex or papulatus, and more closely resemble the bites of insects, appearing often in clusters or patches; yet they are found intermingled with true lichenous papulæ. This lichen is more common on the neck, trunk, and face, than on the extremities, and though most usual in young subjects, is not infrequent in adult or old age, when it becomes a matter of some difficulty to distinguish it from prurigo, as will be seen hereafter. Much itching and tingling accompany the affection.

L. tropicus, known in warm climates as prickly heat, or in Italy by the term pellagra, comprehends all or any of the symptoms mentioned as appertaining to the former species, or to the forms I shall presently describe, which become modified, augmented, and excited by the temperature of tropical climates; the papulæ are accompanied by a more violent pruritus, and often cover the whole body, which then becomes the seat of the most intolerable irritation, inducing the sufferer to tear his skin, so as to produce ulcerations and excoriations, which are very difficult of cure, unless a removal to a milder region can be accomplished; yet I have often seen sailors and others thus affected on their return from India and elsewhere, when their disease has perfectly resembled what I have said of L. agrius, and shall say of the inveterate forms of lichen.

The last remaining species of this disease on the chart, which I shall notice, is exemplified by the models from children, and termed lichen infantilis, the strophulus of Willan and his followers. This species has precisely the same identity with the different varieties of lichen in adult life, that psoriasis infantilis exhibits with that complaint, when occurring in mature age; the greater vascularity and irritability of the skin in infancy, determining the only visible difference, and the more usual exciting cause being the irritation of dentition, or improper feeding and want of cleanliness.

This rash, well known by the popular name of red gum, very commonly disappears when the infant has completed his first set of teeth; but it commonly continues to a greater or less degree after its first appearance, notwithstanding curative efforts, until the above process is accomplished. The varieties of strophulus, as mentioned by writers, entirely correspond with the divisions I have named of lichen, but they are of a brighter red tint, being accompanied by more or less surrounding inflammatory blush: thus the S. intertinctus, S. albidus, and S. volaticus, answer to the description given of L. simplex sparsus; and the S. confertus, with L. confertus, whilst S. candidus is to be referred to L. urticatus.

We will now take a cursory glance at the different forms of lichen, the first which I have called sparsus, consists in a scattered or diffused distribution of papulæ, and it may occur in union with any species of the complaint; it is, perhaps, the most usual manner in which lichen appears.

The second form, confertus, differs only from the preceding, in the papulæ being grouped or collected together, into spots or patches, instead of being spread irregularly over the surface of the affected portion of the body; these patches are prone to heal in the centre, and spread by the circumference; occasionally, also, the healing process commences on one side of the circular patches, whilst the opposite border extends; thus bands and irregular figures are formed, as in psoriasis gyrata, into which, as into the other varieties of psoriasis, this form of lichen occasionally seems to merge.

The third form, L. pilaris, differs only from the L. simplex sparsus, in the circumstance of the papulæ being developed on those eminences of the skin which give exit to the hairs, to the bulbs of which the inflammation of the disease often extends itself; so that this variety of lichen commonly affects the skin more deeply than those hitherto mentioned.

The fourth form, circumscriptus, may comprehend any of the foregoing manifestations in a circumscribed spot; such lichenous patches are very common, and often would seem to be a sort of plaything for the patient, who amuses himself with scratching them in his leisure hours, and thus continues a complaint, which would often disappear of itself if undisturbed.

The last form the different species of lichen may assume I have termed inveteratus, which, as I have already observed, is more commonly an attendant upon the species Willan has designated agrius. When this is the case the disease shows itself by a confluent eruption of papulæ, of a bright red colour, arising from an inflamed surface, accompanied by more or less constitutional disturbance, and attended by sensations of burning heat and insupportable irritation, which are much increased at night from the warmth of the bed; the complaint in this form is an absolute torture. When this severe form of lichen arrives at its chronic stage, the skin assumes a harsh, dry, and rough aspect, and is divided by deep furrows covered with a furfuraceous secretion.

As might be expected, much constitutional disturbance attends L. inveteratus, as demonstrated by pains in the epigastrium, in the region of the liver, vomiting, diarrhœa, and other disorders of the digestive organs.

The duration of this complaint may extend to nearly the whole life, and the patient finds but a temporary relief from his sufferings from any of our remedies.

The causes of lichen must be sought for amongst those already cited, as producing other eruptions of the skin; gastro-intestinal inflammatory affections, and hepatic derangements, being more constantly found to precede or attend lichenous diseases, than other maladies of the skin. Heat of weather, or sudden atmospheric changes, influence these eruptions in a very marked manner, and the return of hot weather, or a particular season, is often the signal for a periodic visitation of lichen, in any of its forms or varieties; this is particularly the case in persons of irritable constitution and high nervous development, who, besides, seem most liable to the complaint. Indeed, mental emotions of any kind, in such parties, are not unfrequently followed by an eruption of lichen. The most usual complications of lichen are psoriasis, impetigo, eczema, and urticaria, the latter being so frequently witnessed as to constitute a recognised form of the disease L. urticatus. I have also found it attend L. lividus, when it would come under the designation of purpura urticans of Willan; the connection of lichen with pemphigus is also called pompholyx pruriginosus by the same author.

I have never seen lichen appear as a critical eruption, though it has been considered the scabies critica of authors; yet, I think its external appearance very constantly relieves internal disorder of long standing in cases where such a symptom has been pre-existing; and I have witnessed such complaints alternate, the internal manifesting itself on the disappearance of the external, and vice versa. Lichen and its varieties present so many anomalous appearances, that they are apt to be confounded with other cutaneous complaints, particularly scabies and eczema; but the absence of a cavity in the papulæ, filled with lymph or pus, and the anatomical portion of the dermis occupied by the malady, will at once establish our diagnosis, for instance, as lichen has its seat in the papillæ of the dermis, the situation it occupies on the outer and posterior parts of the members, will distinguish it from scabies or eczema, which follow the distribution of the cutaneous follicles, and therefore are seen more commonly in the flexures of the joints, and on the internal surfaces of the limbs. In addition to which, sulphur and its compounds very constantly produce irritation, and aggravate lichen, whilst they have a curative effect on these diseases; a circumstance that may often usefully be borne in recollection, when determining this disease. There is more difficulty in discriminating between lichen and prurigo; but the absence of redness or inflammation in the latter complaint, for the most part affords a sufficient means for diagnosis.

With regard to the prognosis of lichen and its varieties, this will much depend upon the cause and duration of the complaint; if it be recent and may be supposed to originate from the heat of the weather, a fortnight or three weeks' regulation of the diet, and the daily exhibition of sulphate of magnesia in the acidulated infusion of roses, will suffice for its removal; but, on the other hand, should the complaint have become chronic, it may last for months and years, and require a gentle mercurial course and external stimulants for its cure; the great torment occasioned by this complaint in otherwise healthy individuals, and the incessant friction to which they subject the affected parts, tend much not only to aggravate, but also to prolong the disease. It is scarcely possible to conceive a greater degree of misery and irritation arising from any complaint of the skin, than from lichen in its severe or inveterate forms, which also seem only alleviated by a long perseverance in any remedies which can be employed; though, for the most part, they may be ultimately moderated by venesection, and active purgation, with the use of tepid mucilaginous, or gelatinous baths, and a strictly regulated diet, confined to milk and boiled meats, all stimulants being excluded; and when thus subdued, a cure may sometimes be accomplished by frictions with mercurial ointment over the diseased parts, until the constitution is slightly brought under the influence of the mineral.

In the less severe forms, for which a cause is not readily traced, the cold bath at the atmospheric temperature, or the shower bath, has often proved useful, whilst the mineral acids in a vegetable bitter, or the decoction of bark, either with or without saline purgatives, have been found efficient remedies; the system of counter-irritation requires very skilful and careful management in cases of lichen; yet creosote, trisnitrate of bismuth, biniodide of mercury, &c., may be occasionally used with success, when the disease is not in one of its numerous exacerbations, in which case local or general bleeding may be called for, and iodine and colchicum indicated.

Every case of chronic lichen will, however, require careful study, that not only its cause may be discovered and removed, but also that our remedies may be adapted to its particular stage or condition, as well as to any peculiarity in the constitution of the patient. But, Gentlemen, I sh... endeavour to elucidate this part of my subject, the treatment of lichen, more completely in the cases which at our next meeting I shall bring to your notice, and as several interesting examples of this disease are now in attendance at the Institution particularly one of that rare form Willan has named L. lividus; I shall obtain the personal attendance of these parties, so that you will not only have an opportunity of verifying what I have said by the models prepared for your inspection, but by the manifestations of Nature herself, which after our best efforts have been exerted, still furnishes the examples that may best guide us in the complex study of cutaneous diseases.

ORIGINAL CONTRIBUTIONS.

A PRIZE ESSAY ON PURULENT ABSORPTION.

Communicated to the MEDICAL TIMES by THOMAS OTTLEY RAYNER, M.D., F.S.A., &c.

(Continued from page 18.)

The experiments I have detailed are imperfect, because, in the first, the matter injected was not nearly of the consistence as pus; in the second, the dog survived too short a time to allow any marked effects to develope themselves. Nevertheless, their results, together with the other considerations I have mentioned, justify the conclusion that the irritation produced by pus, if merely mechanical, is, at least, of a very violent kind; and a strong opinion that in many cases, pus, in contact with living tissues, excites inflammation having a specific tendency to terminate in the effusion of more pus. The question in its various bearings is one of great interest, and deserves special investigation, of which I hope one day to make it the subject.

We have seen, from the cases and experiments which I have cited in different parts of this essay, that consecutive abscesses show a marked preference for certain organs and textures, viz., the lungs, the liver, and the joints, and afterwards in order of frequency for the spleen and the muscles. How are these facts to be explained?

When we consider that all the blood of the system, and consequently all matters mingled with that blood, must necessarily in each round of the circulation pass through the lungs; that a very large proportion of the blood passes equally often through the liver, and moreover, that, from the peculiar manner in which this organ receives its blood, and from the size and multitude of its capillaries, the circulation through it is very slow, the solution of the question, as far as it regards these two organs, becomes obvious.

The experiment of Cruveilhier, of injecting mercury into the veins, confirm the view here indicated; for, when thrown into the general venous system, the greater part of it was always found scattered through the lungs; but, when into the portal system by means of a knuckle of intestine drawn out through an incision in the abdomen, it was found equally disseminated through the substance of the liver. It is no objection to the inference deducible from these facts, that the pus supplied by phlebitis of a vein that empties itself into the general system, and is, therefore, carried first to the lungs, frequently causes abscesses of the liver also, because Cruveilhier found that, in some of his experiments, many of the mercurial globules were carried *through* the lungs, and were afterwards arrested at different points of their passage through the general system. An observation made by Andral (Essai d'Hem. Path.) also bears upon this point; in a case of disseminated abscesses following a large psoas abscess, he found upon examination with the microscope that the blood of both ventricles of the heart contained pus globules, but that they were much more numerous in the right ventricle than in the left.

It has also been found, by examination of numerous cases in which phlebitis of some of the veins of the portal system has been the cause of death, that abscesses in the liver were the only consecutive lesions produced. A case of this kind is reported by Cruveilhier, in which such abscesses followed violent and repeated efforts to reduce a prolapsus ani; and another has lately been mentioned to me by Mr. Partridge, in which they were caused by the operation for fistula in ano. The lungs and liver, therefore, appear to act as filters, retaining a large number of the pus globules during their passage through them. The liver appears to accomplish this more completely than the lung, on account probably of the less force of the circulation through it, and the complicated nature of its capillary network; that in consequence of the large quantity of blood which passes through them, more pus corpuscles are arrested in these than in any other organs; the necessary result of which is that they become the most frequent seats of consecutive abscesses. But the joints, the spleen, and the muscles, suffer in the next degree of frequency. Can we account for this? A knowledge of the anatomical peculiarities of these organs will, I think, furnish the explanation.

The recent researches of Mr. Toynbee on non-vascular animal tissues, lead to proving that these tissues, the chief of which is cartilage, are nourished by the exudation of the nutrient liquor sanguinis from the vessels in their vicinity, which in consequence, the venous capillaries especially, are very numerous and large; those of the bone, in immediate contact with the articular lamella, form dilatations capable of holding a large quantity of blood, which, therefore, circulates very slowly through them. Those of the synovial membrane and the areolar tissue in its vicinity, serve the same purpose, and accordingly exhibit similar peculiarities. It is evident, from this statement, that if the views concerning the primary seat of the inflammation caused by pus, expressed in a former part of this paper, be correct, that these large sinuses, from the slowness of the circulation through them, and consequent accumulation of the pus corpuscles within them, must be very liable to become inflamed. The bones forming a suppurated joint must also in most cases be purulent in their interior, but I have never met with a case in which this point has been examined into. Such an examination would be very interesting, and should the result I anticipate be established, it would afford a strong confirmation of the above supposition. It is no valid objection to this view that the eye does not often become the seat of an abscess consecutive to ordinary phlebitis, because, though the vessels which nourish the extra-vascular tissues of this organ are numerous, and some of them large, they do not exhibit the remarkable ampullæ formed by the veins which supply cartilage. In puerperal fever—a disease very analogous to plebitis, which, indeed, constitutes the principal lesion in many of its forms—the eye-ball very frequently suppurates.

We may account for the frequency of consecutive abscesses in the substance of muscle in a similar manner. The vessels supplying it are very numerous, and two large veins accompany each artery to within one or two gradations of the capillaries themselves. The great vascularity of the spleen indicates the reason why it so often becomes affected.

But can we account in any way for the concentration of the inflammation in patches, so that circumscribed abscesses always result? The question is a very difficult one; the following, however, appears to me a probable answer. Pus mingled with the circulating blood must, when carried to the lungs, be diffused pretty equally

throughout those organs; but, nevertheless, it is easy to conceive that a greater number of corpuscles may be carried to one or two capillary veins together, than to others, and consequently the disturbance of the circulation in them would be more complete than in their neighbours.

According to recent observers, the first stage of inflammation consists in enlargement of the vessels in which it takes place, and consequent slower motion of the blood within them, just as we see in a mountain river, which at one part contracts itself into a rapid stream, at another deepens and widens into a pool, in which the current is very slow. The blood circulating, therefore, more slowly in such vessels, the pus globules would accumulate in them more and more at each round of the circulation, and inflammation would be thus determined in such spots, while the rapidity of the circulation through the surrounding vessels would be increased, and the chance of pus corpuscles being arrested in them diminished. Suppuration in one joint rather than another in different cases, must be determined by similar accidental circumstances.

I am quite unable at present to account for the lower lobes of the lungs being always more extensively affected than the upper ones, or for the preference which disseminated abscesses exhibit for the surface of these organs. A similar preference for the surface being shown in the liver also, indicates that it depends principally on some peculiarity in the mechanism of the circulation. In the early part of this essay I endeavoured to prove that in all the cases in which disseminated abscesses following a primary lesion had been discovered, such primary lesion either was actually found to be, or else from its nature and situation was very likely to be complicated with purulent phlebitis. It would appear from this that phlebitis is the only disease in which infection of the blood by pus, in quantities sufficient to cause consecutive abscesses, takes place. Some pathologists, however, have recorded the opinion that pus globules exist in the blood in a number of diseases.

Mr. Gulliver, for instance, in a paper published in the *Phil. Mag.*, September, 1838, announced that he had discovered with the microscope pus globules in considerable numbers, in the blood of patients labouring under erysipelas, small pox, consumption, hectic from chronic abscesses, &c. Mr. Lane, in a letter to the *Medical Gazette*, shortly afterwards, confirmed this statement; and I find that Andral, in his recent Essai d'Hem. Path., also says that he has seen pus globules in the blood in similar diseases, marked by characters so decided as to admit of no doubt about their nature. Now these statements would, if true, go far to invalidate the theory which it has been my object in this essay to establish, because we do not find disseminated abscesses common in such diseases. I believe them, however, to be erroneous, for the following reasons:—

1. Because in all inflammatory states of the system, the lymph or colourless corpuscles of the blood have been found to increase greatly in number, and to become larger than those observed in the healthy state; in this condition they have so much the appearance of pus corpuscles, that it is almost impossible to distinguish one from the other. With the kind assistance of Mr. Bowman, I have examined under his microscope, various specimens of blood taken from patients suffering from several of the diseases mentioned by Mr. Gulliver. The following are a few of the results:—

1. Blood taken from the right ventricle of a dog who died from the injection of pus into the veins. Examined forty-eight hours, p.m. Pus globules very abundant.

2. Blood taken after death from the arm of a man who had died of sweep's cancer. Many lymph globules, with small granules like those found in pus.

3. Blood from a vein in the back of a patient with vomicæ in the lungs. Lymph globules more abundant than natural.

4. Blood from child with lumbar abscess. Rather more lymph globules than healthy blood.

5. Blood from an erysipelatous foot. The same result. The lymph globules observed in many such instances presented no characters sufficient to distinguish them with precision from the pus corpuscles contained in the blood in the first instance mentioned.

2. The recent researches of Mr. Addison, and more especially those of Professor Gerber, tend to show that reparation is effected by means of these lymph or exudation corpuscles, which are thrown out upon an injured surface, and become organised in the form of the particular tissue to be repaired; that, when inflammation runs high, these are produced in too great abundance; that the supernumerary ones apparently die, and are thrown off from the inflamed surface in the form of pus corpuscles; that this result never takes place in an internal organ till inflammation has gone so far as to produce disorganisation; and that it is no more possible for pus produced in such situations to get into the circulation, than it is for pus thrown out upon an external surface to find its way unaltered into the blood.

I conclude, therefore, that the corpuscles seen by Gulliver, Lane, and Andral, were lymph corpuscles, and that pus in quantities sufficient to cause disseminated abscesses, never enters the circulation, except in cases complicated by phlebitis.

It is no objection to this conclusion that disseminated abscesses have been found without any phlebitis being detected. 1. Because the examination is incomplete and, therefore, invalid, unless all the large veins, as well as the interior of the bones, are inspected. 2 Because the local appearances of a phlebitis, the pus from which it has caused disseminated abscesses, may disappear before the death of the patient from the latter lesion.

By some it has been objected to the theory I have endeavoured to sustain, that we every day see large abscesses disappear by absorption of the pus they contain into the general system, yet no disseminated deposits follow; but the objection betrays ignorance of the known laws of physiology, which point out the possibility of the absorption of substances in solution only: indeed it is absurd to suppose that a solid body like the pus corpuscle can pass unaltered through the equally solid walls of the absorbent vessel. That pus is often absorbed is true, but before it can be so, the pus corpuscles must undergo some change, probably solution, after which it is taken up, and then excreted by the proper emanations. Sometimes it is left behind in the form of cheesy matter.

Suppuration in the lymphatics seldom or never gives rise to consecutive abscesses, because the matter is arrested in the lymphatic glands, to which it is necessarily first conveyed; these appear to act as filters to the pus, and to prevent the solid parts of it from passing into the circulation.

The question has been suggested, Are any other of the products of inflammation besides pus, capable of causing consecutive abscesses? The only experiment that I am aware of, bearing upon this point, is one performed by Magendie, who caused consecutive abscesses in the joints of a dog by injecting into its veins ten ounces of the serum of the blood of another dog. It would seem, therefore, that serum and flakes of lymph probably, if carried into the circulation in large quantities, may cause such disturbance in the capillaries as to terminate in suppuration. But considering the readiness with which effused serum is absorbed, the large quantity necessary to produce the effect, and the fact that when a sufficient examination has been made pus has almost always been found the exciting cause in the human subject, I imagine that the production of abscesses by any other means must; in nature, be very rare.

CASE OF PUERPERAL CONVULSIONS.

By D. Watkins, Esq., London.

Mrs. Rawlings, aged twenty-six, of a sanguine temperament. This is her fifth accouchement; had gone her full time, and was attended and delivered by a midwife, ten, p.m., March 29, 1846. The fœtus and placenta were expelled naturally, and the labour was a remarkably easy one. During the period of utero-gestation she suffered occasionally from several attacks of headache, and this pain continued, with slight intermissions, until after delivery, when it gradually increased; during the night she complained of giddiness. At twelve, meridian, fourteen hours after delivery, headach increased, and was accompanied by a fit of vomiting, soon followed by strong convulsions.

Half-past one, p m. I first saw the case. The symptoms were of a distressing character: the mouth drawn to one side; the breathing laborious and quick, each expiration characterised with the puffing or bellows-noise so constantly noticed in apoplexy; a gurgling noise in the throat; skin hot, and profusely perspiring; the pulse full and rapid; the head hot, and the carotids beating violently; the pupils contracted, and unconscious of the presence of light; the paroxysms appearing about every eight minutes.

Venæsectio. ℥ xx, statim.

℞. Hydr. chloridi, gr. v, statim sumend.

A bladder with ice applied to the head; Empl. lyttæ nuchæ, and mustard poultices applied to the calves of the legs and soles of the feet.

The convulsive paroxysms at first came on every eight or ten minutes, but after the bleeding, &c., the intervals became gradually longer, and they entirely disappeared about half-past three, p.m. A violent state of restlessness supervened, which again was followed by a drowsy stage, interrupted frequently with slight fits of delirium.

Five, p.m. By rousing, she shows some symptoms of returning consciousness. Dr. Lever arrived at this stage. Extractio urinæ, which was slightly albuminous; highly acid

℞. Ol. terebinth, Ol. ricini, āā ℥ j; Dec. avenæ, ℥ xx; fit. enema statim inject.

℞. Ant. pot. tart., gr. iss; Magn. sulphatis, ℥ ss; Liq. ammon. acet., ℥ iss; Aquæ ad. ℥ vi; capt. coct. duo larg. 4tis horis.

Ten, p.m. Has less headach; has slept soundly; restlessness nearly gone; skin moist; pulse low; bowels not relieved.

Rept. dosis misturæ 2dis horis.

One, a.m. Bowels opened; brain relieved, and talks perfectly rationally; complains of uterine pains; the lochial discharge established; thirsty, and slight headache.

Perstet in usu medicinæ.

March 31. Has passed most part of the night in sound sleep; still complains of slight headach and thirst; bowels have been freely opened. Infant put to the breast.

Perstet. in usu medicinæ.

April 1. Feels comfortable; headach and thirst gone; tongue moist and clean

Ten, p.m. Going on well; no bad symptom.

ON ALBUMINURIA.

By Dr. George Gregory.*

"Almost all the diseases which have hitherto come under review are characterised by a symptom, or group of symptoms, easily cognizable during life, and often as obvious to the casual observer as to the experienced physician. Small-pox, measles, jaundice, apoplexy, consumption, and diabetes, afford familiar illustrations; but we have now to investigate a disease which depends on the lesion of a deep-seated internal organ, and whose chief feature is only to be detected during life, by careful study and accurate chemical research. Such a complaint is by no means uncommon, and must doubtless have occurred to the observation of the older authors. Many cases of this disease were described by them under the general appellation of *dropsy*. Some were designated, with even less of scientific accuracy, by the term *decay of nature*.

"Dr. Bright, in 1827, having first directed the attention of physicians to this subject, the disorder has been sometimes called *Bright's disease*, and the peculiar disorganisation of the kidney, on which it depends, *Bright's kidney*. More recently, the albuminous condition of the urine has been con-

* Extracted from the sixth edition (just published) of Dr. Gregory's admirable work on the "Practice of Medicine"—a volume which we can conscientiously commend to a place on the library table of every one of our readers.

sidered as the most important, because the most frequent, and the most easily cognizable, among the symptoms of the malady; and the term albuminuria has been proposed and very generally adopted as its pathological designation. In diabetes the urine is loaded with sugar. Here the urine is almost uniformly impregnated with albumen, that animal principle coagulable by heat, which is so familiar to us in the white of eggs. But a variety of other symptoms are present also. We have therefore to investigate these, to point out under what conditions of the general system albuminuria occurs, from what causes it originates, with what disorganisations it is associated, to what extent it affects life, and how its advances may be most effectually controlled. The labours of contemporary writers have thrown much light on these interesting objects of research.

"*Symptoms of Albuminuria.*—The affection so designated may, like rheumatism or pneumonia, show itself in an acute or in a chronic form. The acute form is ushered in by rigors, succeeded by a hot skin, nausea and vomiting, uneasiness, or a dull pain in the loins, with a scanty secretion of albuminous urine. In almost all cases, general anasarca appears at the same time, of that kind which has been already described, (p. 251) under the title of inflammatory, active, or arterial dropsy. In a few cases the secretion of urine, after a few days, is suspended altogether, when comatose symptoms supervene, and death speedily ensues. At other times, the inflammatory action extends to some other internal organ, and the patient dies from the results of peracute pleurisy, pericarditis, pneumonia, or peritonitis. Occasionally the strength of the patient's constitution, aided by the vigorous efforts of the physician, overcomes the disease, and perfect recovery succeeds. In a certain proportion of cases recovery is only partial, and a foundation is laid for that more chronic ailment which indicates the granular degeneration of the kidney, and to which the term Bright's disease is commonly applied.

"The kidneys, when examined after death so occurring, appear larger than natural, of a dark or chocolate colour, and evidently gorged with blood. The other viscera present appearances which may be generally anticipated from the character of the symptoms during life. Whether the gorged condition of the kidney, and the albuminous state of the urine, are the primary and more essential features of the disease, or only incidents in the series of phenomena, are points still open for discussion. It has been already stated, when treating of anasarca, that this acute malady admits of essential relief by general bloodletting. Cupping glasses applied to the loins, active purgatives, saline diuretics, and the antiphlogistic diet and regimen, are here obviously indicated.

"*Chronic Albuminuria.*—The leading feature of this disease is the voiding of a highly albuminous urine of low specific gravity. The concomitant symptoms have, for the most part, very little reference to the kidney, and are only to be connected with it by a process of reasoning. The patient often complains of a weight in the loins. The bladder is irritable, and there is a frequent desire to make water. The urine is occasionally red, or dark coloured, as well as albuminous, and sometimes tinged with blood. The countenance is pale; the skin dry and harsh. Vomiting is sometimes observed. The bowels are flatulent and irregular, and the liver is frequently suspected to be the primary seat of mischief. Patients labouring under this disease are liable to inflammatory and congestive states of other important organs. Hence, in its progress, coma, convulsions, and apoplexy may occur. The heart, too, may become implicated, and dropsy is almost always met with sooner or later.

"It will be observed that these symptoms have no very direct or obvious reference to the renal affection; and it is far from improbable that the advance of science may detect some more general condition of the frame, to which all the phenomena now enumerated are referable. In the meantime the albuminous condition of the urine observed during life, and the disorganisation of the kidney detected after death, are the points which specially merit our attention.

"*State of the Urine.*—The urine in this disease is always of very low specific gravity, never exceeding 1012, and sometimes falling as low as 1004. Now the specific gravity of healthy urine is about 1015, and in diabetes mellitus it often rises to 1040. This unnaturally low density of the urine in albuminuria, notwithstanding the addition of the new material, shows that the other ingredients proper to healthy urine (the urea and salts) are preternaturally diminished in quantity. The solid contents of healthy urine amount to about seventy parts in a thousand. In this disease they are often reduced to twelve, and I have been met with even lower than this.

"The quantity of *albuminous* matter in the urine varies in different cases, and in the same case at different periods of the disease. It does not necessarily increase with the advance of the disease, but rather the reverse. In general, the albumen is most plentiful in its early stages. The presence of albumen in the urine is readily detected by the simple experiment of heating the urine in an iron spoon over the flame of a candle. An additional test is the application of nitric acid, which has the property of precipitating albumen in a flaky form. This is especially applicable when the suspected urine is preternaturally alkaline, and the albuminous matter thereby rendered less sensible to the action of heat.

"Healthy urine contains no albumen. This animal principle is the great agent in nutrition, and is not an excrementitious product. We might reasonably presume, therefore, that the urine in this disease obtains its albumen at the expense of the serum of the blood. Experiment confirms this opinion. It has been ascertained, by Dr Christison and others, that the more the urine is loaded with albumen the less of it there is in the serum of the blood, and the lower is the specific gravity of the serum. Another remarkable change which the blood undergoes is the rapid disappearance of its red particles, or colouring matter. It is remarked by Dr Christison, that no disease so closely approaches hemorrhage in its power of impoverishing the blood and exhausting its red particles as albuminuria. Hence arises the peculiar hue of the patient's skin, and that waxy or leuco-phlegmatic aspect which so strongly characterises the victims of this complaint.

"In the early stages of the chronic form of albuminuria, the urine is generally scanty. Instead of the two pints which are commonly discharged in health, the quantity seldom exceeds one pint, and is often less than half a pint. In the more advanced periods of the disease, the quantity of the urine approaches more nearly the standard of health. In some few cases it has been found even to exceed it.

"*Renal Dropsy.*—Before proceeding to notice the morbid condition of the kidney so generally associated with an albuminous state of the urine, it will be useful to describe what pathologists now consider as the secondary effects of chronic albuminuria. They are of the same general nature as those already noticed as succeeding to the acute form of the disease. Foremost in the train stands dropsy, especially anasarca. The diagnosis of renal dropsy from that which is mainly dependent upon cardiac or hepatic disease is not easy. The skill of the physician is here tried to the utmost, and at times the most experienced pathologist may be deceived. The circumstances that chiefly direct his judgment, as to the presence of renal dropsy, are the following: —1. A very low specific gravity of the urine, more especially if, with diminished density, there be present also diuresis, and an albuminous condition of the urine. 2. The complexion of the patient. In the cardiac variety of dropsy, the countenance is often dusky and inclined to purple. In that which depends on hepatic disease, a yellowish tinge of the conjunctiva is generally perceptible. In the true renal dropsy there is a leucophlegmasia, or sallowness, very expressive of chronic disorganisation. 3. The previous history of the patient, the apparent causes of the disease, and the absence of symptoms indicative of cardiac or hepatic disorganisation. To this it may be added, that ascites and hydrothorax are less common in renal than in cardiac disease. But as cardiac and renal disease may, and often do, co-exist, there are obviously many occasions when the diagnosis is impossible.

"The other complications or secondary affections concurrent with albuminuria, are headache, lethargy, epileptic fits, coma, and occasionally complete apoplexy. Dr. Christison is inclined to view coma as the normal mode by which this disease proves fatal. Serum is in such cases usually found in the ventricles of the brain, and to the pressure thence arising, the comatose state may reasonably be attributed. Some pathologists contend, that urea retained in the blood may act as a poison to the nervous system, and in this manner give rise to the succeeding apoplexy. Of seventy fatal cases observed by Dr Bright, death was ushered in by well-marked cerebral symptoms in thirty.

"The complication of renal with cardiac disease affords some curious matter of speculation. Dr. Bright records the particulars of a hundred cases, in twenty-seven of which no affection of the heart could be detected. Hypertrophy was the most frequent condition of cardiac disease observed in the remaining cases. Whether in this combination the cardiac disorganisation is to be considered as dependent on the renal,—whether it advances *pari passu* with it,—or, lastly, whether renal disease be ever produced by the cardiac, are questions in pathology not yet satisfactorily determined. An hypertrophied heart is doubtless calculated to occasion congestion of the viscera, but albuminous urine is not a necessary concomitant of cardiac disease.

"*Morbid Appearances.*—There is considerable variety in the appearances described by authors under the generic title *Bright's kidney*. The surface of the diseased gland is generally mottled or speckled with uneven projections. In some instances it is quite rough and scabrous. The size and consistence of the kidney are equally liable to vary. In the early periods of the disease it may be found larger than natural, and of softer consistence; in the advanced stages, contracted in bulk, and hard. When cut into, it will be found that the outer or cortical portion of the organ is the chief seat of disorganisation. It is granular, and generally of a pale-yellow colour, well described by Dr. Watson as presenting the aspect of a cut parsnip. The medullary structure of the kidney is seldom much altered. In the most aggravated forms of the disorder, the tubular portions of the gland are almost entirely absorbed, while the infundibula and pelvis are dilated. The renal veins have been noticed as firmly plugged up by coagula of blood.

"*Causes of Albuminuria.*—This disease prevails at different ages, and under apparently very opposite conditions of the general system. It has been met with in infancy. In 1838, a boy between five and six years old, anasarcous, and passing bloody and albuminous urine, was under the care of Dr. Wilson, at the Middlesex Hospital in London. The dropsy which succeeds scarlet fever is often associated with an albuminous condition of the urine, and granular degeneration of the kidney. The chief subjects of the disorder, however, adults in the prime of life. Men are more liable to it than women. The scrofulous habit of body seems to give a tendency to it. Intemperate habits undoubtedly favour the disposition to this degeneration of the urinary apparatus. Exposure to cold and moisture have been noticed as one of its direct exciting causes. It has sometimes appeared to originate in injuries to the loins.

"*Prognosis.*—The ample manner in which morbid anatomy has determined the pathological connexion between albuminous urine and granular degeneration of the kidney, is alone sufficient to show the very dangerous nature of the malady. Dr. Watson has known a few instances of what seemed to be complete recovery after well-marked symptoms of albuminuria, but he acknowledges that the disease is prone to recur.

"*Treatment.*—The remedies specially adapted to the albuminous condition of the urine have not hitherto been determined with the accuracy which is desirable. The pain and tenderness of the loins, so often present, suggest the propriety of relieving the tension of [illegible] by cupping glasses, but general bloodletting is contra-indicated by the exhausting tendency of the disease, when it occurs in its chronic form. The dropsical accumulation must be removed, as far as possible, by purgatives and diuretics. The secretions of the skin are to be

encouraged by the use of warm baths and diaphoretics. Dr. Osborne remarks, that when the renal affection is uncomplicated with other organic mischief, the dropsy will disappear on restoring the functions of the skin. Opinions vary as to the propriety of employing mercury in the granular degeneration of the kidney. Instances of recovery are recorded after severe salivation, but the general impression is, that the mercurial influence is prejudicial rather than salutary. It is not improbable that more enlarged experience will unfold some remedy peculiarly appropriate to the treatment of albuminuria. The natural tendency of so many drugs to pass off by the kidney, and to influence its secretion, holds out great encouragement to attempt a more effectual treatment of this disorder than any which has been yet devised."

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE CASES.

SECOND SERIES.

Reported by THOMAS FRANCIS I'ANSON, of St. George's Hospital.

MEDICAL CASES.

CASE I.—*Case of Phthisis with Pneumonia.*

Emma Wilson, aged twenty-four, cook, was admitted June 4th, by Dr. J. A. Wilson. Bowels irregular; urine high coloured; tongue clean; catamenia regular; evident dyspnœa. She complains of extreme weakness, with shortness of breath, and a sense of tightness across the chest, without, however, any actual pain in that part. She has also sore throat, which causes difficulty in swallowing, and slight inconvenience in speaking. From the medical man who attended her previous to her admission, we learned that about six weeks ago she suffered from a severe attack of pneumonia, which caused the lower parts of both lungs to become quite dull on percussion, and almost impervious to air; that crepitation had gradually but only partially returned; and that she had since remained in an extremely debilitated state. On questioning her she stated that she had never been very strong; that about Christmas last she caught a cold with sore throat; since that time she had not been perfectly well, for she had frequent hacking cough with a little frothy expectoration; and on running up stairs she had experienced shortness of breath, and any unusual exertion had soon fatigued her; that on one occasion she had spit up a little red blood; she had also perspired greatly at night and her bowels were sometimes very much relaxed. Since the attack she has not been able to breathe unless propped up in bed, and her nights have been very restless from coughing. She has blue irides, dilated pupils, and a clear skin, with the superficial veins clearly seen.

June 6. On making a physical examination of her chest, general motion of the ribs was evidently diminished, but there was no particular depression in the infra-clavicular regions. On applying the hand there was found to be increased vibration on speaking and coughing. Percussion gave a short, dull sound over the whole of both lungs, which was not much increased on inspiration, either in duration or clearness. On applying the stethoscope respiration was heard to be quick, but with the expiratory sound comparatively prolonged, and louder than natural; towards the apices of the lungs it was distinctly tubular; it was not at all jerking; here and there a sub-crepitant ronchus could be heard on taking a full inspiration; bronchophony and bronchial cough were very distinctly heard; the heart's action was also heard over a much larger space than natural. Under the clavicles a distinct murmur of the subclavian artery was heard; her tonsils were enlarged, and ragged from superficial ulceration, causing an abundant secretion of mucus.

Haust. nitri, Inf. cinchon., āā ℥vj bis die; Pulv. ip. c. gr. vj; Haust. potas. cit. ℥ss o. n.; Decoct. cinchon. ℥ vj; Tinct. myrrh.; Lin. ærugin, ā ℥ ss. ft. gargarisma; two eggs; milk, Oij; beef tea, Oj.

9. She has obtained more rest at night, her cough being more quiet; but the difficulty of breathing has decreased very little; her throat is in much the same state. She has had several liquid motions this morning.

Vin. rubri. ℥ ij, quotidie.

10. Complains of occasional catching pains in the left side during inspiration.

Cataplasm, sinapis lateri thoracis sinistro.

11. She appears very much worse this morning. Pain in side has increased; very great difficulty of breathing; pulse rapid and feeble; face blue; lips of a deep purple colour; pulse more rapid and feeble. Motions of chest more diminished, both on expansion and elevation. Crepitant ronchus may be heard nearly over the whole of the left side of the chest, especially during inspiration.

M. S. ad ℥viij; Haust. salin. ℥iss; Vin. ant. tart. m. xl 6tis horis.

She appeared to be more easy for a short time, after the bleeding, but gradually became delirious, and died in the night.

POST-MORTEM EXAMINATION THIRTY-SIX HOURS AFTER DEATH.

Thorax.—The left pleura was generally adherent throughout its whole surface by the effusion of recent lymph; the adhesions being easily separated. The right pleura was apparently healthy, and not adherent. Both lungs were filled throughout with miliary tubercles, some as small grey points; others, especially towards the apices, were larger and of a yellow colour; but none of them had approached the condition of softening. The left lung was also congested and inflamed, full of spumous fluid; its bronchi were also redder than natural. Heart apparently healthy; much coagula in right side; left side empty.

Abdomen.—Liver, spleen, and kidneys rather congested, otherwise healthy; much ulceration of the small intestines, with tubercular deposit in the seat of the ulcerations; and tubercles also found in the mesentery.

Larynx and Trachea.—Considerable superficial ulceration of the whole of the larynx, extending down the trachea; this had entirely destroyed the epiglottis, and a considerable portion of each tonsil.

I think, on viewing the phenomena of the present case, the most probable solution of it will be that, about Christmas last, from cold, or other cause inducing congestion within the lung, some slight deposit took place. I do not suppose that nearly so many tubercles could have been deposited there as were found at the post-mortem examination, or she could never have performed her common household duties, which she did, though with difficulty. But the difficulty itself was a sign of some obstruction; she also acknowledged having had slight hemoptysis—a further sign of obstruction in the vessels.

While in this condition she was attacked with pneumonia, either from some fresh exciting cause being applied, or from the irritation of the tubercles themselves. This, re-acting on the primary cause, gave rise to a fresh deposit, and left her with so little healthy lung that it was barely sufficient to aerate the blood slowly, and in small quantity. The second attack of pneumonia, though but slight, was sufficient instantly to turn the scale which before hung by so slender a thread.

For a correct view of the pathology of tubercles we are much indebted to Laennec, but still more so to Andral, and Carswell. According to their researches they are generally found to be small hard bodies, varying in size from that of a pin's head to that of a hemp seed, round, generally of a grey, and sometimes of a drab colour. They may be interspersed at considerable distances in a lung otherwise healthy; more frequently they are clustered together in groups, with the intervening structure consolidated; in some may be seen minute yellowish-white spots, which, when the granules are clustered together, often appear as a considerable white mass in the centre. Sometimes they occur as opaque, yellow, rounded masses, of a cheesy consistence, surrounded by indurated tissue; this appears to be formed out of the primary granules, where they have coalesced, though they may sometimes be found without any surrounding induration, as in the bronchial tubes, pleura, &c. Concerning the nature of these tubercles, Laennec considered that they were foreign bodies deposited in the lung, governed by their own inherent laws, independently of the tissue of the organ. Andral thought they were produced by chronic inflammation, causing induration of individual cells. The late Dr. Carswell, a most talented pathologist, supposed that the tubercular matter was secreted from the blood, along with the mucus of the air passages, and that it became set in this mucus, chiefly on the inner lining of the air cells. It might thus quite fill the cells, or only line the interior of the cavity, leaving the centre full of mucus; it was this which led Laennec into the error, that tubercles began to soften from their centre. It might also line the lesser bronchial tubes; these, when cut across, looking like rings of tubercular matter. This doctrine of Dr. Carswell's is held by most eminent men of the present day. Dr. C. J. B. Williams, however, appears to think that they arise in the interstitial texture, which becomes indurated in points, from a low and chronic inflammation; and he cites the instance of the pleura, which, when attacked by the same kind of inflammation, effuses lymph of low organisation, and fibro-cartilaginous structure. He says that these indurated points in the lung, being possessed of a low degree of vitality, throw into their centre a still less organic form of albuminous matter, which, pressing on the indurated matrix, causes its absorption; and thus is effected the conversion of the grey induration into crude tubercle.

Such are the separate views of two pathologists, but as this is a matter more of pathological than practical interest, and as none of the tubercles in the present case had passed on to softening, I shall pass at once to the *cause* of tubercles, which may be either local or constitutional.

The *local* causes are exemplified in persons who had enjoyed good health until attacked by some inflammation within the chest, which, being allowed to pass into the chronic form, lowers the vital powers, and leads to the deposition of albumen in degraded condition of a low degree, or perhaps devoid of organisation. Now, as lesions in this form may be confined to certain parts only, the cause being local, so we see that it is more tractable, and time is thus gained for the blood to accommodate itself to the diminished surface of the pulmonary apparatus; the existence of patients may be thus prolonged for years, with considerable comfort to themselves, so long as fresh causes of irritation are guarded against. Mechanical irritation will also induce this form, as in dry grinders, miners, and needle-pointers.

The most frequent *constitutional* cause is the existence of a scrofulous diathesis, in the large class who present this state of system, the blood is in an impoverished condition, and is greatly predisposed to deposit tubercular matter on the application of any slight exciting cause, whether it be imperfect nutrition, exposure to cold, unhealthy air, depressing mental emotions, profuse discharges, or the suppression of long continued ones, low fevers, chlorosis. I think that the disease in our patient may be safely said to arise from constitutional causes; she was evidently scrofulous, and owned to her system being easily impressed by slight causes.

The age of the patient may sometimes be looked on as a predisposing cause, for from twenty to thirty the growth is completed, but the blood and its vessels have not yet lost their habit of deposition. During this period the disease is most fatal, as found by Louis from statistical tables. He also found the average duration was from three to nine months.

The superior and posterior parts of the upper lobes are where tubercles are generally first deposited, and where they also first begin to soften. Dr. Williams thinks the reason of the upper lobes being more liable to deposit, is from the greater quantity of interstitial cellular tissue which they contain, aided also by the smaller capacity of of motion which they possess. Had softening commenced in our patient, it might have been the means of prolonging her life for some time, as it would have acted by bringing down the mass of circulating fluid to the lessened capacity

of the remaining lung. I must now pass on to the consideration of some of the phenomena of pneumonia.

On examining her body after death, the whole of the texture of the lung, which was not the seat of tubercular deposit, was found in a state of sanguineous congestion, or *engorgement* as it is termed. It was soft like the spleen, heavy, and on cutting into it a reddish frothy serum issued from it. This Dr. Williams believes to be generally the effect of the coagulation of blood after death; for when the blood remains fluid this is not observed. He believes also that the blood remains in the distended vessels, and in the tissues adjoining; but is not effused into the air cells, as is the common notion.

But we must suppose, from the account of her former medical man, that in her first attack the inflammation had proceeded further; in fact, that *hepatisation* had taken place. When this happens the lung presents a solidified appearance, resulting from the too abundant deposition of lymph in the tissues. It may be of a red, pink, or grey colour; but this is seldom uniform, for on making a section numerous minute granular points are observed, of a lighter colour than the rest; these were formerly thought to be air vesicles distended with mucus, but are now made out to result from the distension of the coats of the vesicles, from the interstitial deposit of lymph. This state is often recovered from, of which our patient is an example. But it often also passes into that of suppuration.

The other post-mortem appearances were what are constantly met with in phthisis, and may be set down as the effect of the scrofulous diathesis. Tubercles were found in the mesentery, also in the small intestines, where they had excited ulceration. The superficial ulceration of the larynx was what is often called laryngeal phthisis. Dr. Watson believes it to result from the irritation of the purulent secretion of softened tubercles; and says that when one lung only is diseased, the ulceration occupies only the corresponding side of the larynx. However, in this case it could not be from softened tubercle, as none of them had reached that stage. The vascularity of the bronchi, and pleuritic deposition of lymph were the effects of pneumonia; the inflammation spreading to the adjoining surfaces. I might further state with respect to the entrance to the air passages, that Louis has found the epiglottis ulcerated nearly as often as the larynx or trachea.

The history which was given of the complaint before the attack of pneumonia was such as usually occurs in the early stage of tubercular deposit. It commenced with slight cough, which is often regarded as the effect of a common cold, accompanied with clear frothy expectoration coming from the bronchi. She had had slight hæmoptysis; this is of very common occurrence. Louis found it in two-thirds of a number of phthisical patients, and more frequently in women; it may be either copious or inconsiderable. There was slight dyspnœa, only observed after exercise. She had little pain; this is of more frequent occurrence when pleuritic adhesions exist. Diarrhœa is of very frequent occurrence; out of 112 Louis had found it in all but five; it is the result of ulceration about the ileum and colon. Emaciation is observed in about one half the cases from the commencement; it had not happened with this patient, but I ought to have mentioned that the muscles were pale and flabby.

We had an opportunity of seeing the symptoms of the fresh attack of pneumonia, though they were of but short duration. We saw that it attacked one side only; more generally it attacks the opposite side, but we must suppose the existence of some strong irritation to determine it to the position which it occupied. There was sharp pain; this might be rendered more severe by the co-existing pleuritis. Dyspnœa was greatly increased. There was not much cough or expectoration; in fact, the powers of life were not equal to the efforts of coughing, and she died no doubt from the effects of the sputa accumulating in the air passages, and suffocating her (*i. e.* death by apnœa). Had the expectoration appeared, we should have found it to be a viscid, jelly-like mass of a tawny or rust colour, from the intimate admixture of blood. The delirium which occurred before her death showed that the aeration of the blood in the lungs was very materially interfered with, and caused the circulation of venous blood in the brain. She had, also, still further diminished motions of the chest; I presume that we might have heard the friction sound of pleuritis but for this circumstance. There was the characteristic minute crepitation; this proceeds from the smaller bronchi and air vesicles, and is generally believed to result from the rapid bursting of a number of small air bubbles. Dr. Williams, however, contends that the distended blood-vessels press on the smaller bronchi, which are lined with a thick viscid mucus, causing their sides to cohere, and that the air in passing separates the sides forcibly, and gives rise to the sound in question.

The general symptoms alone afforded strong grounds for the diagnosis of the early stage of tubercular deposit; the physical signs confirmed it. If we had had the opportunity of watching all the changes as they occurred in succession, from the commencement, we should have found (at least this is generally the case) that the deposits commenced in the apex of the lung, and by preference on the left side. The pneumonia, on the other hand, would have commenced in the lower lobes, and by preference on the right side. The existence of pneumonia on both sides was also a probable indication of the existence of tubercles.

The prognosis on her admission was quite unfavourable to the idea of her lasting for any long time; she had had a severe attack of pneumonia, which had excited tenfold the disposition to deposit tubercular matter; there was no vomica to assist in bringing down the mass of blood to suit the diminished capacity of the lungs; the night sweats and diarrhœa were natural attempts to effect that change, but they could not perform it with sufficient speed; the constant irritation in the lung again set up inflammation, and she died.

The treatment at first was entirely palliative: a light tonic, with Dover's powder at night, to procure her rest; and an astringent and slightly stimulant gargle to her throat. She took more liquid nourishment than would have been advisable had she been able to swallow solid food; this she was unable to do on account of her throat.

On the reappearance of the pneumonia a small quantity of blood was taken from her, and tartarised antimony given, with the view of emptying, in some measure, the distended vessels of the lung, and also of the head; such, however, was the violence of the attack that she soon sunk.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Meeting of April 28, 1846.

Dr. Chambers, F.R.S., K.C.H., President, in the Chair.

On the Capacity of the Lungs and on the Respiratory Movements, with the view of establishing a precise and easy Method of detecting Disease by the Spirometer. By John Hutchinson, Esq.; presented by Dr. Cursham.

After giving an introduction to the subject by a history of respiration from the earliest period to the present, with an account of the researches that have hitherto been instituted upon this inquiry, the author commenced by dividing the different portions of respired air under certain heads—without which the subject of respiration becomes very complicated and difficult of expression. He remarks:—"The latitude of movement performed by the walls and floor of the chest, to maintain a constant current of air through the air-cells of the lungs, admits of three common degrees of expression:—1. Extreme expansion or enlargement; 2. Extreme contraction or diminution; 3. An intermediate or quiescent state.

"These divisions necessarily superinduce a difference in the quantity of air respectively drawn in or thrown out of the lungs." These movements or portions of air he described, for perspicuity, under five heads:—

1. Residual air; 2. Reserve air; 3. Breathing air; 4. Complemental air; 5. Vital capacity.

This division was clearly illustrated by different diagrams, and may be expressed best in the author's own language:—

"It is well known that the lungs are not capable of being emptied by the most violent muscular effort; therefore at all times as long as the lungs maintain their natural structure during life or death, a certain quantity of air remains in these organs, which is termed 'residual air,' and over which we have no control."

"'*Reserve air.*'—The gentle respiratory movement regulating the ordinary breathing, is an intermediate effort between extreme voluntary thoracic contraction and dilatation, and hence it is that a portion of air always remains in the lungs after the gentle expiration, which may be thrown out if required: to it I have applied the name '*reserve air.*'"

3. Breathing air.—That portion required to perform the ordinary gentle inspiration and expiration, which we term "*breathing air.*"

4. Complemental air.—That portion which *can* at will be drawn into the lungs by a violent exertion, beyond the moderate effort of ordinary breathing, which constitutes the deepest possible inspiration, is only occasionally added if required; to this we apply the term "*complemental air.*"

"5. Vital capacity is all these three latter divisions combined, being the greatest voluntary expiration, following the deepest inspiration, to which I apply the term "*vital capacity.*"

These divisions differ in their character. The residual air is independent of the will and always in the chest. The reserve air, to use a simile, is a "*tenant at will.*" The breathing air constantly passing out of and into the chest. The complemental air—seldom in the chest—and when it is only so for a brief period.

The connection of these with diagnosis in disease here followed, and the whole subject of the paper resolved itself under the following heads.—1. The quantity of air expelled from the lungs in connection with other physical observations on the human frame; 2. The absolute capacity of the thorax, cubic and superficial measurements; 3. The respiratory movements and mobility of the chest; 4. The inspiratory and expiratory muscular power; 5. The elastic power of the ribs, and the voluntary muscular respiratory power; 6. The function of the intercostal muscles; 7. General and practical deductions in reference to detecting disease in man.

Each of these subjects were fully treated, and much valuable information both for the physician and the physiologist will be there found, but which we must here pass over and simply add, that Mr. Hutchinson has examined upwards of 2,000 cases with reference to respiration, and that the quantity of air exhaled from the lungs is affected by four circumstances—height, weight, age, and disease. By height in the arithmetic progression of eight cubic inches for every inch of height. By weight, nearly in the ratio of one cubic inch for every pound to eleven stone, and then a decrease nearly in the same ratio up to fourteen stone. By age (from thirty-five to sixty-five), a decrease of rather more than one cubic inch per year.

Under the second head much curious and new matter appeared in relation to the actual capacity of the thorax and the vital capacity, and the relative size of the chest to the body. Under the third head, the respiratory movements of the sexes, and relative movements in health and disease, as measured by the spirometer. Under the fourth head, the muscular power in relation to health. Under the fifth head, entirely new considerations of the combined forces of elastic or involuntary power, and muscular or voluntary respiratory power. Under the sixth head, the intercostal muscles being true expiratory muscles. Lastly, general and practical deductions.

Here Mr. Hutchinson gave many interesting cases of the spirometer detecting phthisis pulmonalis before the ordinary means now in vogue, and many other subjects relative to the application of his instrument to disease generally in the human frame, which he demonstrated as very broadly marked by twenty-five or thirty per cent.

Mr. Hutchinson, when the reading of the paper

was concluded, showed the method of making an examination of the capacity of the chest by means of the spirometer. He experimented first on himself, and showed that although his chest was small, thirty-three inches in circumference, yet his height indicated that his vital capacity was 260 cubic inches. The person while under examination should stand as erect as possible, the least bending of the head causing a corresponding difference in the quantity of air expired.

Mr. Hutchinson then invited any gentleman present to test the spirometer, and one of the members coming forward was first measured as to his height, which was found to be five feet five inches, and consequently the amount of air he should expel, if in health, would be, according to the tables, 206 cubic inches. The result proved that he expired 205 cubic inches—a very near approach to the amount indicated in the tables.

Dr. Taylor was of opinion that not only the Society, but the profession at large, were greatly indebted to Mr. Hutchinson for having carried out a series of such laborious investigations on a subject of so much importance. It was of course impossible, from merely having read an abstract of a paper embracing a variety of views possessed of great novelty, that their real value could be at once duly estimated. The paper itself must be read and studied before it could be fully appreciated. If the results at which Mr. Hutchinson had arrived should ultimately be proved to be correct, by the testimony of others, they would be of the greatest importance, but until they were confirmed due caution must be exercised in receiving them. Meanwhile, as far as Mr. Hutchinson could, he had guaranteed their trustworthiness, by the length of time he had devoted to the investigation, and the very large number of observations he had collected. He (Dr. Taylor) had som illy observed and repeated many of his (Mr. Hutchinson's) investigations, and could so far vouch for their accuracy. Some of the results obtained by Mr. Hutchinson were very singular, and they might serve to show how necessary it is in such a science as medicine, to be guided by observation alone; for although not at variance with admitted principles, still they were not such as would have been anticipated by *à priori* reasoning. Such, for example, is the rule which it appears Mr. Hutchinson has established, that the quantity of air expelled during the act of expiration is not in proportion to the circumference of the chest, but rather to the height of the individual. This is just the reverse of what would have been anticipated. One of the most interesting and important results obtained by Mr. Hutchinson is, that the height of an individual being given, the quantity of air in cubic inches which he should expire, providing his lungs are in a healthy state, may be calculated very closely. This rule is founded on very many observations, and was shown very fully by the gentleman who had kindly consented to test the spirometer, and who had breathed out air into the instrument to within one cubic inch of the calculated amount. The application of this principle to the investigation of disease is of great importance. Mr. Hutchinson, in the course of his inquiries, has ascertained that persons labouring under phthisis expel a much less quantity of air than they would have done in the full enjoyment of health. In the case of Freeman, the American giant, the quantity of air he expired previously to the invasion of disease was ascertained; some time afterwards, while in ill-health, but before two experienced auscultators could detect any physical signs of pulmonary affection, when again tested by the spirometer, he expelled about 90 cubic inches less air than before. The man ultimately died of phthisis. He (Dr. Taylor) had himself thus examined a number of consumptive patients, and had found that they expired much less air than they would have done if in health. This mode of physical investigation of the state of the chest, he thought, would prove of great importance in practice. It would appear that the quantity of air thus expired is not of necessity proportioned to the absolute size of the lungs or the capacity of the chest; for, from the casts exhibited by Mr. Hutchinson, it seems that one man who had expired a large quantity of air, had lungs which were much smaller than those of another man who expelled during expiration a much less quantity of air. The amount of air thus expired Mr. Hutchinson considers to be dependent on the degree of motility in the parietes of the thorax; and this is of importance in its application to disease, as the less amount of air expired by phthisical patients is not owing to the space occupied in the lungs by the tubercular deposit, but to the diminished motility of the chest. This fact complicates greatly the practical application of the instrument, as there are many diseases, both within and without the thoracic parietes, which may diminish their motility, and thus lessen the amount of air expired. At present, therefore, the diminution in the quantity of air expired, as indicated by the spirometer, can only be regarded as indicative of the presence of some disease, the nature and seat of which must be discovered by other modes of investigation. The result of Mr. Hutchinson's inquiries are such as to render it imperative on medical men to carry out his views by further investigation, and either confirm them, or render them invalid. A spirometer has been obtained for the hospital with which he (Dr. Taylor) is connected, and the results of the observations there made, as far as they go, tend to confirm Mr. Hutchinson's statements. An important recommendation of this instrument is the exceeding simplicity of its application. The physical examination of the chest requires close attention, and a prolonged education; but this instrument may be used for the purposes for which it is intended without much previous education. He (Dr. Taylor) therefore agreed with Mr. Hutchinson that the spirometer would be of great service to army and navy medical officers in testing the state of health of recruits, and to the life assurance offices in the examination of candidates for policies of insurance.

Dr. Alderson inquired of Mr. Hutchinson in what way he explained the movements of the abdominal muscles in deep inspiration, except by the descent of the diaphragm?

Mr. Hutchinson remarked that he had always observed that when a healthy man, standing upright, took a deep inspiration, the chest became enlarged, and almost entirely by the movements of the ribs; the sternum projected more, and the ribs and shoulders were elevated, the abdomen receding, and compressing the abdominal viscera. The enlargement of the chest was principally in the antero-posterior direction. He (Mr. Hutchinson) did not consider that the diaphragm could descend while the abdominal muscles were drawn in, and he thought it perfectly in accordance with physiology to admit that the diaphragm might enlarge its circumference without descending, its area being nearly quadruple that of the sectional area of the chest. In men the ordinary respiration was entirely effected by means of the diaphragm and abdominal muscles, but the reverse was the case in deep breathing. The chest may enlarge either by means of the diaphragm or by the ribs, but not by both consentaneously. When patients are lying down, the back becomes fixed, and the movements of respiration are altered, so that if the medical attendant examine a person when in bed, he may be led into error. The knowledge of this fact induced Mr. Hutchinson to attribute to it the ease derived from the sitting posture by patients labouring under dyspnœa. In women the ordinary respiration is more by the movements of the ribs than of the abdominal muscles, but whether this was from the effects of their dress, or to allow of the process of utero-gestation, he could not decide. He entertained, however, considerable doubt of the former cause.

Mr. Ayrton then inquired of Mr. Hutchinson what effects he had observed the previous habits of life exert on the capacity of the lungs, and the intensity of their action, in lifting the column of mercury, for instance, in the smaller instrument? Whether persons in the habit of using the lungs greatly, such as public singers or speakers, merely acquire a greater facility in expiring the air into the instrument, or whether they have, by their mode of life, increased the capacity of the lungs, or the intensity of their action?

Mr. Hutchinson in reply observed that the vital capacity increased with the height of the individual, but the respiratory power was at the maximum in persons averaging five feet eight inches in height, and decreased in gradual proportion as the individual exceeded that height. Persons five feet eight inches in height, being in a state of health, could by the action of the true respiratory muscles, raise a column of three inches of mercury, while persons who were six feet high could raise a column only two inches and a half high. The power of expiration was also one-third higher, but that was not dependent on muscular action, but on the elastic property of the ribs, which is not the case in the act of inspiration. The last-named act is one of direct muscular power, and he (Mr. Hutchinson) had given in the paper a series of tables illustrative of the alternate actions of the elastic property of the ribs, and the muscular action of the respiratory muscles in expiration and inspiration. The latter act, he thought, required the muscular power to resist the direct influence of the elastic power, amounting to many hundreds of pounds' weight.

Dr. Chowne inquired what explanation Mr. Hutchinson offered of the singular fact he had brought so prominently forward, that the absolute height of a person bore a direct relation to the vital capacity, which the size of the chest did not?

Mr. Hutchinson said that the relation was certainly singular, but it really was the case that the taller a person was, the more air would be expelled from the lungs by expiration, and he sought to explain the fact by referring it to the extent of motility of the thoracic and abdominal parietes, and not to the actual size of the cavity of the chest. He illustrated this remark by referring to some plaster casts of the chest, from which the lungs and heart had been previously removed. One of these, which he exhibited, had been taken from a man who, while in apparent health, had expired 251 cubic inches of air, while the actual space in the chest for the organs of respiration was only 248 cubic inches—three inches less than the amount of air actually expired. The motility is directly in proportion to the respiratory movements, which Mr. Hutchinson showed by drawings to extend over the whole trunk down to below the knees. Any interference, therefore, with the motility would be indicated by the spirometer, and then further investigation would show the part affected. It is generally believed that adhesion of the pleura interfered with the movements of the chest, but this, at all events, is not always the case; for, in the instance just alluded to, the motility exceeded the actual capacity of the thorax, although the two pleuræ were firmly adherent together, so much so that the heart and lungs could not be taken out of the chest without laceration of their structure. He (Mr. Hutchinson) thought that the lateral movements of the ribs, or between the contents of the chest and its boundaries, was so slight that adhesions could not interfere with the action of respiration. He then exhibited the cast of a chest which measured 457 cubic inches, while only 202 cubic inches of air were expelled. The man was corpulent, and only five feet, eight inches in height; there existed, therefore, a mechanical impediment to motility. He could not explain why this motility increased with the height of the individual; but he was certain of the fact, which was supported by upwards of two thousand cases. Mr. Hutchinson then drew attention to a table in which all the heights—increasing in the arithmetical rotation of inch by inch—from five to six feet, were drawn upon a scale, and opposite them were placed the relative depth and breadth of the chest. It showed that the size of the chest did not increase in proportion to the increase in height, but that, on the contrary, the taller men had generally smaller chests in every way than those who were shorter. The shallowness of the chest was also remarkable, the average depth from the apex of the lungs to the diaphragm being from seven inches and a-half to eight and a-half. The shortest man, who could expel the least quantity of air, had the deepest chest. He was only five feet, four inches in height.

A member asked Mr. Hutchinson if he had examined any dwarf with the spirometer?

Mr. Hutchinson had examined the dwarf, Don Francisco Santos, who is now being exhibited He had a vital capacity of 56 cubic inches. He had also examined a person who was seven feet high; the span of his hand was nearly thirteen inches, and the length of his foot thirteen inches and a-half. His vital capacity at 60° was 464 cubic inches,

which, if calculated at 98°, the temperature of the human body, would raise it to nearly 500 cubic inches.

SYDENHAM SOCIETY.

Anniversary Meeting, May 1st, 1846.

Dr. Paris, President, in the Chair.

The secretary read the report of the council, from which it appeared that the Society was evidently increasing in prosperity and success. Of the books issued during the first year, 1750 copies were issued, and since then 400 more have been printed; of the second year 2250 copies were printed, although at the time the number of members was not sufficient to justify the proceeding; but the Society has progressed to such an extent since, that the whole edition has been exhausted, and many applications for the volumes of that year have been, consequently, unsatisfied. Animal chemistry, it was then stated, was at present attracting so much attention, and was of itself a subject of such importance, that the council had readily adopted the offer made to them by Dr. Day to edit Simon's Animal Chemistry—a work which had obtained for the author an European reputation. The works of Paul of Ægina it was considered unnecessary to praise; they were also before the Society. The council felt great regret that so much delay had occurred in the publication of the works for the past year; it had been fully anticipated that a volume would have been ready for delivery in the autumn. An apology was also made for certain errors and irregularities which had occurred in the transmission of the volumes to the members, which, it was said, was in part owing to the frequent removals and errors in the addresses of the members. It was also intimated that a fourth volume for the year 1845-46 would shortly be published. In the last report, it was announced that the works of Dr. William Hunter would constitute one of the publications of the Society, but the sub-committee, to whom these matters are referred, had reported that it would not be desirable to undertake them, and consequently the intention was abandoned. The complete medical bibliography, also proposed at that meeting, was so far in progress, that a correspondence had been opened with several continental scholars, with a view to ascertain the degree of assistance that might be counted on in carrying out that object. It had been the intention of the council to issue Harvey's works during the past year, but it could not be completed within the time. It was now nearly ready, and would, it was hoped, be published soon. Hewson's works were also in the press. The attention of the council had also been directed to the valuable character of certain papers and communications published in the transactions of the medical societies, and some of these, which had appeared prior to the commencement of the present century, had been considered worthy of republication. A volume of obstetrical essays had been selected by the sub-committee, aided by Dr. Simpson, of Edinburgh, who had undertaken the office of editor. The papers and prize essays of the French Academy of Surgery had also been examined, and a series of essays on the head and neck would be published by the Society in one volume. The works of Hippocrates, a series of medical essays, several publications on medical ethics, and general indexes to the medical journals, were also proposed.

The report then proceeded to acknowledge that many valuable hints had been received from members in different parts of the country, and very great assistance from the honorary local secretaries, of whom about thirty had been appointed during the past year, in addition to the gentlemen already holding that office. It concluded by stating that it was the object of the council that the members of the Society should derive all the benefit that possibly could be obtained, and claimed that their intentions in that respect should be judged by the character of the works they had published.

The treasurer's report was then read, from which it appeared that the petty cash, advertisements, and expenses, amounted to £27 17s 11d; the ... orial, to £131 5s; the book-binding, to 108 11s 9d, paper, to £306 12s 8d; the printing, upwards of £500; a donation to the secretary of £157, and his salary for three-quarters of a year, £118 2s 6d. At the end of the last year there was a balance of upwards of £900; the subscriptions of 2105 members amounted to £2214 13s; interest from the Union Bank, £23 11s 8d; and dividends, £5 13s 10d. In addition to this there were certain sums resulting from the subscription of members desirous of obtaining the books published during the first year. At Ladyday last, when the treasurer's accounts were audited, there was a balance of £2076 16s 5d, since which date there had been received £53 16s, making a total of £2130 12s 5d, and moneys paid away, leaving a balance of £571 14s 10d.

The report of the council was then adopted, after which the ballot for the officers and council took place, and the following gentlemen were elected:—President: J. A. Paris, M.D., F.R.S., President of the Royal College of Physicians. Vice-Presidents: W. P. Alison, M.D., F.R.S.E., Professor of Medicine in the University of Edinburgh; Sir Benjamin C. Brodie, Bart., F.R.S., Sergeant-surgeon to the Queen; Sir William Burnett, M.D., F.R.S., K.C.H., Inspector-general of Fleets and Hospitals; W. F. Chambers, M.D., F.R.S., K.C.H., Physician to the Queen and to the Queen Dowager; Sir James Clark, Bart., M.D., F.R.S., Physician to the Queen and to the Prince Albert; Sir Philip Crampton, Bart., F.R.S., Surgeon-general to the Forces in Ireland; Sir Alexander Crichton, M.D.; W. G. Crosse, Esq., Norwich; Joshua Henry Davidson, M.D., First Physician to the Queen for Scotland; John Davy, M.D., F.R.S.; Charles Hastings, M.D., Worcester; John Kidd, M.D., F.R.S., Regius Professor of Medicine in the University of Oxford; P. M. Latham, M.D.; Robert Liston, Esq.; Sir Henry Marsh, Bart. M.D.; Sir James M'Grigor, Bart. M.D., F.R.S.L. and Ed., Director-general of the Medical Department of the Army. Council: Henry Ancell, Esq.; W. R. Basham, M.D.; W. D. Chowne, M.D.; John Clendinning, M.D., F.R.S.; Bransby Cooper, Esq.; James Copland, M.D., F.R.S.; John Erichsen, Esq.; John Forbes, M.D., F.R.S.; Arthur Farre, M.D., F.R.S.; Cæsar Hawkins, Esq.; Edward Headland, Esq.; John Hilton, Esq., F.R.S.; Thomas Hodgkin, M.D.; Samuel Lane, Esq.; James Luke, Esq., Jonathan Pereira, M.D., F.R.S.; Benjamin Phillips, Esq., F.R.S.; G. O. Rees, M.D.; William Sharpey, M.D., F.R.S.; Samuel Solly, Esq., F.R.S.; George James Squibb, Esq.; Theoph. Thompson, M.D., F.R.S.; Erasmus Wilson, Esq., F.R.S.; Jas. A. Wilson, M.D.

The usual votes of thanks to the president, council, treasurer, secretary, and honorary local secretaries, were then proposed, and carried, after which the Society adjourned.

The meeting was very thinly attended.

SURGICAL SOCIETY OF DUBLIN.

[From our own Correspondent]

Meeting of the 18th of April.

R. Carmichael, Esq., President of the College in the Chair.

Dr. Bellingham produced for the inspection of the Society the heart of a female, in which a quantity of lymph was deposited on all the valves, viz., the mitral, tricuspid, and aortic, yet there had been, he said, scarcely a single symptom of endocarditis, and not one of the auscultatory signs of disease during the patient's life. She stated, on her admission to St. Vincent's Hospital, about three or four weeks ago, that her only complaint had been dyspnœa and debility, which commenced about three months before, and persisted until a short time previous to her admission. The limbs were now œdematous nearly as far up as the knees, and there was slight abdominal effusion; there were, however, no indications of disease in any part of the system, and upon accurate examination of the heart, no palpitation or unusual action of the organ was present. Dyspnœa existed to some extent in the recumbent position, but in the semi-erect posture there was little or none. The heart pulsated in the normal situation, there being no bruit or other abnormal sound whatever, and no dulness. The cardiac sounds were perfectly distinct and regular. This was the condition of the patient until within a day or two of her death, which occurred in ten days after her admission.

The autopsy disclosed the very extensive evidences of disease seen in the preparation, namely, a large mass of lymph, which almost entirely closed up the mitral orifice; the lymphatic depositions on the semilunar valves of the aorta, and on the tricuspid, had more resemblance to vegetations. One of the kidneys was in the condition characteristic of the first stage of Bright's disease, but the urine during life presented no traces of albumen. The liver had the nutmeg appearance indicative of congestion. There was, as before observed, anasarca of the extremities, and slight effusion into the abdomen.

The case, Dr. Bellingham observed, was a very remarkable one, showing the existence of very extensive endocarditis in a perfectly latent condition, the only symptom of cardiac disease, as he had before remarked, having been a certain trifling amount of dyspnœa. Upon coming to the hospital she had not one symptom of the disease: there was no pyrexia, scarcely any dyspnœa in the semi-erect posture, and she was even able to sleep in the recumbent position. The only secondary symptoms were anasarca and slight ascites. All the circumstances of the case, Dr. Bellingham observed, appeared to mark it as one of anæmia; the impulse of the heart was that species of sudden tap peculiar to the anæmic condition, and the patient sank under gradually increasing debility. The pulse, however, remained perfectly regular to the last, and amounted to 120. The woman had been subjected to a reverse of circumstances. She never had rheumatism.

Dr. Benson read the details of a case of diabetes, together with some remarks upon the disease. He was induced to do so, he said, from having had under his care lately at the City of Dublin Hospital three patients affected with this disease, on one of whom he had an opportunity of making a careful post-mortem examination, and he brought the subject under the notice of the Society in the hope that on discussion some useful hints might be elicited respecting the nature and treatment of this curious and formidable disease.

Thos. Kearney, a pedlar, aged forty-eight, admitted to the hospital on the 12th January, 1846, was a married man, of sandy complexion, and of the nervous temperament, below the middle height, very thin and appearing to be at least ten years older than he really was. He had been much exposed to the vicissitudes of the weather in the fickle climates of England and Ireland, and had many reverses of fortune, but never was of intemperate habits. About fourteen months before admission his thirst became excessive, and his nights disturbed by the necessity of frequently rising to pass water. His flesh wasted, and his strength failed, though he ate much more than formerly, and with a craving appetite, which, if not speedily and generously supplied, was followed by a most distressing sense of sinking and prostration. He also had occasional attacks of water-brash.

On the 5th of last May, about six months after the complaint first attracted his notice, he was admitted into the Northern Hospital, Liverpool, where he remained some weeks, and left much relieved, the urine being reduced to five quarts a-day, about half the quantity he passed on admission. His diet while there consisted of meat, griddle bread made of wheaten meal, a quart of ale daily, and some tea. The medicine he got seemed to have been the carbonate of ammonia. In the autumn and early part of the winter he was in one or two of the Dublin hospitals, and came under Dr. Benson's care, as above stated, on the 12th January. His symptoms then were vertigo and headache, pains in the cheeks, impaired sight, defective memory, irritable temper, great debility, unsteady gait, excessive thirst, sweet clammy mouth, voracious appetite, burning sensation in the epigastrium, pains and weariness in the loins. His tongue was reddish at the edges and tip; his gums swollen and tender; teeth a little loose; abdomen rather tympanitic; bowels too free, though more frequently confined, and the discharges pale and unhealthy. His pulse was 80, and feeble; sleep disturbed with dreams; feet cold, but not swollen; skin harsh and dry; urine pale, very abundant, and of the sp. gr. 10·37, smelling faintly,

like fresh hay, and having a taste, as he described it, like turnip-water.

Next day a portion of his water, of which he had passed fourteen quarts in twenty-four hours, afforded on evaporation a very abundant syrup. He was ordered a pound of beef and a pound of mutton, coffee, without sugar, and a small quantity of toasted bread, daily. A pill containing opii gr. ij, acet. plumbi gr. ij, ter in die. In a couple of days he begged to be allowed three pounds of meat instead of two

On the 20th, when a week under treatment, the urine was of the same specific gravity, but reduced to twelve quarts in the twenty-four hours; thirst less; bowels too free; said he was rather better in every respect, except his head, which ached even more than before.

On the 27th, a fortnight under treatment, he felt better in every respect; urine diminished to seven quarts, bowels regular. Ordered to walk out as much as possible when the weather permitted, with warm clothes, continuing the same medicine and diet.

March 1. Continued to improve during the previous month; had occasional headache, and frequent heartburn, for which latter he took, with great relief, sodæ ex sic. gr. xx ter in die. When he came into the hospital his mouth was so parched that he kept a plug of dry meat, or some such thing, constantly in it to solicit the secretion of saliva He could now, however, do without this. His walks and exercise were gradually lengthened. Weakness in his knees was most complained of; his bowels were regular; urine reduced to four quarts, and of the specific gravity 1030 About the middle of March he professed himself nearly well, but though much improved he (Dr. Benson) could not consider him cured. The urine was reduced to four quarts in twenty-four hours, but its specific gravity never fell below 1030, his appetite and thirst were very much diminished, still much above the healthy standard He was advised to leave the hospital, but preferred staying a little longer, fearing he could not yet obtain for himself the liberal diet allowed him there. After this he often complained of headache, heartburn, pain in the stomach, &c., but Dr. Benson took no notice of him, thinking he made the most of his ailments, for the purpose of securing himself in his present comfortable quarters.

On Thursday, the 2nd of April, at the morning visit, Dr. Benson was informed that the man had spent a very restless night, "going about the ward, and quite out of his mind." There was now an expression of fatuity in his countenance, the skin of which had a bluish tinge. His skin was cold; eyes natural; tongue clean; but he unceasingly pushed it out and drew it back, as if instinctively searching for drink. He drank freely whatever was given to him, but asked for nothing. He answered questions incoherently; but he was neither comatose, nor violent, nor was there paralysis of any limb. It could not be ascertained that he was in any pain, but he winced when the epigastrium was pressed. His feet were stone cold; pulse frequent and feeble, and he had passed water involuntarily in his bed—the quantity passed, as far as could be guessed, being much less than he was in the habit of evacuating. Counter-irritants of all kinds failed to arouse him. He became perfectly comatose next day, and on the day after (Saturday evening) expired.

The body was examined on Monday morning. It was greatly emaciated; the skin harsh and rough; not discoloured. The abdomen, when open, exhibited no sign of peritoneal disease. The liver was healthy; the omentum healthy; spleen somewhat enlarged; intestines sound. The stomach looked healthy externally, but felt enormously thick, and presented the hour-glass contraction in a very marked degree. On opening it, large rugæ stood out prominently from the surface, and occupied both large and small extremities, every part in fact except the lesser curvature. They were thick, firm, and running in all directions, and could not be obliterated. The mucous membrane was highly inflamed, presenting the punctiform, capilliform, and maculated vascularity. The kidneys were greatly congested, yet not softened or enlarged. The vessels were so thoroughly injected with blood, that the tubular and cortical portions seemed at first to be with difficulty distinguishable from each other; but they presented no other signs of disease, no deposit, no change of structure, nor any result of inflammation. Perhaps the capsule was more easily removed than from a sound kidney. The ureters and bladder were sound; the latter contained a few ounces of urine, which was kept for analysis. The lungs, though usually tuberculous in diabetic patients, were in this instance perfectly sound, excepting only a few inconsiderable pleuritic adhesions of long standing. The heart also was quite sound; but its coronary vessels were distended with air, and on opening the left auricle a large quantity of air bubbled up with the blood. The pericardium contained more than an ounce of serum. The bones of the cranium were thin, and easily broken, and readily separated from the dura mater, which lay loosely on the brain; and between the two latter, that is in the bag of the arachnoid, a good deal of serum—probably an ounce—was found; there was a little also in the sulci, between the arachnoid and pia mater, but the arachnoid was everywhere transparent. The surface of the brain was very vascular, and the red points in the medullary substance when cut into were large and numerous. The cerebrum was of the average degree of firmness; but the cerebellum was soft, though no where in any marked degree. The ventricles contained half an ounce of transparent and almost colourless serum. The choroid plexus was pale, and filled with the little serous cysts commonly called hydatids. The corpus striatum, thalami, fornix, septum lucidum, &c., were normal.

In his observations on the foregoing case, Dr. Benson said there could be no question, he supposed, but that the cerebral affection was the immediate cause of death. But what gave rise to that?—was it owing to the gastritis so decidedly marked, or to any metastasis of irritation from the kidneys when the man was convalescent, or to the deteriorated condition of the blood, from the long-continued drain exerted on its constituents in the kidneys? We know that in Bright's disease the occasionally fatal results by head symptoms depend either upon the loss to the blood of its albumen, or its being poisoned by an accumulation of urea. Could any similar effect result from the blood in diabetes? A curious fact, one too which gives probability to this conjecture, is, he observed, that the urine found in the bladder after death was only of the sp. gr. 1013, just the weight of urine in decided cases of Bright's disease. Death from cerebral disease was he observed, very rare in diabetes, but as the patient all along complained of headache, the brain was probably the weak organ, and the morbid action, as the original disease subsided, fell upon it in preference to the lungs, by which death generally carries off its victim in diabetes. None of the numerous opinions respecting the proximate cause of the disease appear, he observed, to be established in a satisfactory manner. Willis, who first detected sugar in diabetic urine, attributed the disease to a dyscrasy or intemperament of the blood, resulting from a morbid action of the assimilating powers. Home, Cullen, Rollo, and Prout all assign, as the cause, a defect in the assimilating organs. Rollo says, we allege that this disease consists of an increased morbid action of the stomach, with too great a secretion of, and an alteration in, the quantity of the gastric fluid, producing saccharine matter by a decomposition of the vegetable substances taken in with the food, and which remain unchanged. MM. Mialhe and Contour think there is no increased formation of sugar in the stomach, but a want of power in the blood (from deficiency of alkali), to assimilate the sugar afforded by food. Dezeimais thinks that is a consequence of the thirst caused by chronic gastritis; the kidneys get too much to do, and their activity increases at the expense of the other organs. On the other hand, Mason Good, Dupuytren, Thenard, and others, consider the kidneys in fault. Dr. Baillie supposed a deranged action of the structure of the kidneys to exist, by which the blood there is disposed to new combinations, and that the chyle was so imperfectly formed as to cause the blood to be more readily changed into a saccharine substance by the action of the kidneys. Dr. Lubbock supposes that the skin ceases to throw off its carbonic acid, and that this, uniting with the hydrogen in the system, forms the sugar. Sir Henry Marsh, in his able paper, published in the Dublin Hospital Reports, also attributes the disease to the interrupted action of the skin. From the dissection detailed, can we, Dr. Benson asks, form any opinion as to the proximate cause of diabetes? Perhaps we may come near it by stating what is not the cause. No one, he would say, would contend that the disease within the cranium was the cause. Its contents are generally found healthy, and their diseased condition in the present instance was clearly an effect, not a cause. Were the kidneys the cause? He hardly thought there was enough there to lead any one to such a conclusion. The diabetes lasted a year and a half, yet the kidneys showed no change in bulk, consistence, or colour. They were only more vascular than usual—an appearance which they might assume in a few hours. Is it to be believed that they could have been even in a state of excited action for eighteen months without some alteration in structure? Increased duty they had to perform; but this increase did not originate with them. It was not an excited action, else they would have suffered more. Nor do any dissections made by others show much disease of these organs. Was the skin in fault? Doubtless it was; but secondarily, Dr. Benson thought. It is not the earliest symptom in general, but it comes on in the progress of the disease, just as it does in dysentery and many other affections; but if it were the first symptom, why should thirst be so early and so prominent a symptom? Thus, by the method of exclusion, we arrive, he thinks, at the stomach as the real fons and origo mali.

At the conclusion of his paper, Dr. Benson further observed that both from reading and experience the stomach would appear to him to be the organ most constantly deranged in this affection; at least gastric symptoms are either the first or amongst the first symptoms attendant upon the disease. No doubt the skin and kidneys may very soon be drawn into diseased action, and the blood also; but the question to arrive at is, what is the first link in the chain? Where does the morbid action commence? In the treatment he considered the use of animal food of primary importance, conjoined with which he had given opium and acetate of lead with decided benefit, the latter being known to be a powerful astringent as well as sedative. He looked forward to very beneficial results from this treatment, and they were very satisfactory up to a certain time, at which the case took a change for the worse. The urine had diminished in quantity so much as from fourteen to four quarts in the twenty-four hours, and the man's strength was returning. He complained only of headache, which he had on coming to the hospital, and which on that account could not, he considered, be attributed to the treatment. A curious effect produced by the opium in this and many other cases in which he had given it, was (Dr. Benson remarked) its regulating and keeping open the bowels—a fact which was observed in the present case, notwithstanding the acetate of lead which was given along with the opium. This man's bowels, too—a circumstance unusual in diabetes—were very free on admission. This effect of opium was also verified in a very marked manner in a case of diabetes which had occurred during Dr. King's residence in the hospital, the history of which had been very accurately noted by that gentleman. Besides the animal diet and the use of opium, great attention should in all cases be paid to the state of the stomach, when, along with emaciation, there exists tenderness in the epigastric region, and the other signs of chronic gastritis or dyspepsia. Instead of general bleeding, as strongly recommended by some, Dr. B. would have much faith in the efficacy of topical bloodletting, and regretted not having resorted to the practice in the present case; but when the patient came under observation, these symptoms were not urgent. In cases of diabetes, then, of future occurrence, his treatment would consist, he should say, in the employment of opium, with or without the acetate of lead, leeching the epigastrium, warm baths, and animal food. He hoped the subject would elicit some remarks from the gentlemen present.

The President considered the details of Dr. Benson's case extremely interesting, and that in

the accompanying observations, though brief, there was hardly a point left unsupplied. Dr. Benson's views also, in reference to the stomach as the primary source of the disease, admitted, he thought, of very little question indeed. The healthy assimilation of the food, the president remarked, becomes interrupted by long-continued dyspepsia, and a deterioration of the great mass of the blood finally occurs. He had himself much faith in opium as a remedy in the disease (possessing, as it does, so great a power in checking the quantity of urine) until two or three years since. He gave it at this time in large doses, combined with lead, in the case of a gentleman affected with diabetes, and fatal head symptoms very quickly supervened, the patient having died in twenty-four hours. These results the president was inclined to attribute to the very sudden suppression of urine having given rise to effusion on the brain, for the urine was immediately reduced in quantity in a very remarkable degree—the exact proportion he at that moment forgotten. There was a disposition to head affection in Dr. Benson's case, but in that to which he alluded, there was no symptom of the kind until the opium was given.

Dr. Butcher remarked that pathology does little towards unravelling the mystery in which this disease is involved. In no two of many cases in which he had himself conducted the post mortem examinations did the same appearances present themselves, and this assertion was confirmed by the observations of Home, Dupuytren, Segalas, and a host of other learned investigators, whose several statements regarding the morbid condition of all the renal organs differed remarkably from each other; besides that, they as often found the kidneys natural. The same diversity of opinion holds with respect to the chylopoietic viscera. He therefore thought the assimilating functions primarily at fault, and that, in order to investigate this disease more closely, we must have recourse to the pathology of the fluids.

Dr. Geoghegan observed that the discovery of sugar in the blood would appear to throw some light upon the disease in question, in reference to its dependence on the fluids. Dr. Apjohn, whose high character for accuracy of investigation is well known, had succeeded in detecting sugar in the serum of the blood, as also had some foreign savant whose name he did not remember just then; and this fact tended, he thought, to support the view of the dependence of the disease rather upon the organs of assimilation than upon the kidneys.

Professor Hayran mentioned a case in which he had used dry cupping over the loins, with the most marked benefit. Dr. Hayran was disposed to look upon the sympathetic system as a very probable source of mischief in this disease, inasmuch as in a diseased condition of that system all the fluids are known to suffer deterioration. In the very imperfect knowledge, therefore, which still exists respecting the pathology of diabetes, he thought it would be very advisable to examine most accurately, both by public and private post-mortems, the condition of the sympathetic system.

The President had always endeavoured to excite the action of the skin by warm baths, at the same that he gave lead and opium, for he had never seen a case that was not accompanied by a dry scaly condition of the skin, &c.

Dr. Benson had observed cases attended with much perspiration, or even sweating, from time to time, do better. But the skin, he thought, did not always present that dry, harsh, rough character. In the advanced stages of phthisis, and other diseases, more particularly in dysentery, a dry hard state of the skin may be observed even when there has been previously copious perspiration. An improvement in the state of the digestive apparatus might be expected to effect a corresponding improvement in the functions of the skin. If, as appears clear, the kidneys are not the seat of disease, dry cupping, though useful, could not be expected to cure diabetes. The kidneys acquire increased vascularity from the great increase of action to which they are subjected, but this must be looked on as a consequence, not a primary cause of the disease. Want of action in the skin might cause increased secretion of urine; but to render the latter saccharine something else is required. The sugar must be supplied by the blood, and the blood must derive its supply from the digestive organs, where we know that sugar actually abounds in this affection. The alvine discharges have sometimes been coated with crystals of sugar - grated over. Was this by any deranged action of the kidneys?

Dr. H. Kennedy had opportunities of witnessing the occasional termination of diabetes in phthisis, the diabetes appearing to have sunk completely in the shade, and the urine becoming rapidly decreased in quantity, and losing its increase of specific gravity. He had also known a diabetic patient to be attacked with phlebitis of the lower extremities, of which he died.

The President mentioned a couple of cases, tending to show that arteritis might also be a consequence of the disease in question. One of these, a gentleman under his own care, got Pott's gangrene, of which he died. The other was under Mr. Adams' care, and also died of Pott's gangrene. He spoke now, it should be observed, of inflammation, not of ossification, of the vessels.

Some further unimportant discussion ensued.

PATHOLOGICAL SOCIETY OF DUBLIN.

Meeting of March 14th, 1846.

Mr. Adams in the Chair.

Dr. Green would only occupy the attention of the Society for a very short time, he said, while he mentioned a few particulars connected with a pathological specimen of patulent aortic orifice and dilated heart. The specimen, he observed, had in itself nothing that was new to the Society, similar ones having been so frequently before them on former occasions. A well-marked bruit had existed during life over the origin of the valves, and became louder in the course of the aorta, being heard also in the carotid and subclavian arteries: here, too, there was fremissement and a returning bruit. The pulse at the wrist was very perceptibly later than the impulse of the heart, a sign which he might here observe, is a particularly valuable one; while that laid down by Dr. Corrigan (visible pulsation), though often present, is frequently absent; but the one just mentioned is never wanting. What he was most anxious to direct the attention of the Society to, however, was the existence of a species of false impulse visible at the top of the sternum, and so deceptive at first sight as readily to give rise to a suspicion of the presence of aneurism. However, the diagnosis made was: effusion into the right cavity of the thorax, with a portion of solidified lung lying over the trajet of the aorta, pressing against the sternum to such a degree as to cause it to bulge forwards, and to produce almost complete dislocation of the clavicle at the right side. A material assistance in making this diagnosis, Dr. Green remarked, was derived from observing that the bruit audible over the prominent portion of the sternum was not at all commensurate in extent with the area of dulness, though it was louder at this part than over the heart itself. Dr. Green said he found he was not singular in the conclusion he had come to in making a diagnosis of this case, for a precisely similar one is recorded by Dr. Henderson in the *Edin. Med. and Surg. Transactions*, in which that gentleman had some difficulty in deciding whether aneurism did or did not exist. In the present case the aorta was slightly diseased, and dilated to a considerable extent, and there was dilatation without hypertrophy of the right ventricle. Impulse being a sign to which so much importance is attached in cases like the present, that Dr. G. thought it would be well to record every instance in which this sign proved fallacious, and for this reason principally he was induced to mention the present case to the Society.

Chronic Enlargement of Patellar Bursæ.

Dr. Adams presented casts and specimens to illustrate the pathology and surgical treatment of the chronic enlargement of bursæ over the patella. Dr. Adams would confine his observations exclusively to these chronic enlargements, which were unaccompanied by pain or other inconvenience than that which arose from their size, and the deformity they produced. The cure of this disease seems quite within the power of surgery; but which of the different modes recommended—each of which has been successful—is the best? This seemed to Dr. Adams to be a matter worthy of consideration. The methods by puncture, by subcutaneous incision, by injection, by extirpation, and by free incision, have all had their advocates. It would take up too much of the valuable time of the meeting to discuss the comparative merits of these several modes; but Dr. Adams would beg to lay before the meeting a few casts and observations relative to this subject. Dr. Adams then read a case reported by Mr. M'Dowel.

Eliza Butterton, aged twenty-two, was admitted to the Richmond Hospital on the 11th of March, 1845, with a chronic enlargement of the bursa over the right patella, from which she experienced so much inconvenience that she was anxious to be relieved by any means thought advisable. The tumour was about the size of a hen's egg; the skin covering it had a natural appearance, it had an evidently fluctuating feel, and small foreign bodies could be distinguished in the fluid.

On the second day after her admission, Dr. Adams opened the tumour by a free longitudinal incision, extending from above downward throughout the whole extent of the enlarged bursa. A fluid of an oily appearance escaped, carrying with it numerous small pyriform-shaped bodies, of a whitish colour; and a few of these which, on inspection of the interior of the cyst, were adherent by slender pedicles, were detached from the lining membrane and removed; an oiled dossil of lint was introduced into the bursa, and light compresses and bandage applied.

On the third day, suppuration was established, and a poultice applied; no inflammation or constitutional disturbance whatever was excited; granulations were thrown out from the bottom of the cyst, and the cavity gradually became obliterated.

On the 20th day the granulations were so raised as to require the application of the nit. argent. She was discharged on the 10th of April, the 25th day after the operation, and for the ten days previous had been walking about without feeling any inconvenience.

The next case Dr. Adams had to adduce was that of Mary Moore, aged twenty-eight, a housemaid. She had a chronic tumour, situate over the right patella, which was as large as an orange. She applied to Dr. Power, who gave it as his opinion, that, if she wished for a radical cure, she should go into the hospital, and submit to an operation, which would confine her for at least a month; but, as she was unwilling to do this, he tried a palliative plan of treatment, by puncturing the tumour and letting off a great deal of its fluid contents; this was not followed by any inflammation, but having proved of little advantage, he advised her again to go into the hospital under Mr. A.'s care, which she did on the 19th of Feb. Mr. Adams now made a free longitudinal incision from above downwards into the tumour, and gave exit to about three ounces of a brown oily fluid, in which were seen floating shreds of lymph, and small bodies like boiled rice. The cyst seemed about three or four lines in thickness, and its anterior surface was remarkably smooth and yellow, like the interior of the aorta. Towards the back part of the cyst where it covered the patella, were seen large round transverse bands of yellow tissue, one of which was an inch long, of a cylindrical shape, and fully as large as the largest goose-quill. Mr. A. here exhibited this portion of yellow tissue which he thought it advisable to remove from the cyst to which it adhered by its extremities, while the rest of its surface, like some of the curved columns in the heart, was free all round. Besides these transverse fibrous bands, there were also rounded cartilaginous bodies, as large as peas, attached to the interior of the cyst by pedicles; these with their pedicles were cut out, and now exhibited. The cyst in this case had anteriorly attained such an extent that when its contents were fully evacuated, it formed a loose bag in front of the patella, which, as it could scarcely be expected to contract so much as to prevent deformity, Dr. A. thought it right to dissect the skin from the elliptical portion of the cyst constituting its anterior portion, and to remove so much of the cyst. This having been done, and the foreign bodies removed,

the wound was dressed as in the former case, but the time it took to heal was longer, and the suppuration of course more extensive, but no constitutional disturbance whatever followed the operation.

She left the hospital on the 29th of March, perfectly well, and it was truly surprising how much the thick cyst softened down, and what little projection of the skin, beyond what is natural, remained. A cast, taken by Dr. Green the day she was discharged from the hospital, showed what little deformity was observable: a line of cicatrix, about two lines broad and two inches long, from above downwards, in front of the patella, alone remained; excisions of the bursa situated over the patella, when in a state of chronic enlargement, has been recommended on high authority as the best mode of proceeding. Dr. A. had known this to be very frequently done, and although he might admit that in some cases such an operation might be judicious, still he must express his belief that such cases should form the exception; and that, as a general rule, the operation by a free incision is much the more preferable mode.

He had observed the dissecting out of the bursa to be a very painful proceeding, and in very large tumours could well conceive that it might (if not conducted with caution) endanger the knee-joint. Suppose, for example, a case such as was represented by the cast now exhibited, with the enlarged bursa measuring in its circumference thirteen inches, projecting from the patella seven inches, and consequently completely covering the patella above, below, and laterally. Here Dr. Adams remarked, while a free incision from above downwards would be done in a few seconds with but little pain to the patient, and without any immediate danger of injuring any of the subjacent parts, while excision of such a tumour would be a most severe operation, and it is quite possible that the synovial membrane of the joint might be opened if the greatest care were not used. Whereas the free incision from above downwards is quickly and easily done by any one; infinitely less painful, and the experience of three cases lately under Mr. Adams' care showed that the deformity which might be supposed to remain after the operation of incision into the thickened cyst, is really nothing. Dr. Adams prefers the operation of free longitudinal incision to punctures, injection, or seton, because although these latter means may excite sufficient inflammation to produce a radical cure, yet they are by no means so certain, and Dr. Adams thinks any operation in which foreign bodies are left behind likely to fail in radically curing the disease, because when these foreign bodies are pressed upon while kneeling, new irritation and inflammation arise, and consequent recurrence of the disease. Another great advantage of the free incision is its not being followed by any constitutional disturbance. Puncture, subcutaneous incisions, setons, &c., may all be followed by inflammation and suppuration of the cyst of the diseased bursa, and be accompanied by a decomposition of the fluid contents of the sac, the pus in such cases becoming remarkably fetid, and much consequent disturbance of the constitution, which is not removed until the fetid pus and gaseous contents of the inflamed bursa are freely evacuated. All these evils, Mr. Adams believes, are prevented by the operation recommended by him, of free incision from above downwards. True it is that in cases where the cyst is thick and capacious, as in the case of Moore, lately under his care in the Richmond Hospital, something more than mere longitudinal incision may be found necessary; the emptied cyst may, as in that case, form a loose bag in front of the patella; but in such cases the surgeon has only to remove an elliptical portion of the cyst, having previously dissected the skin from the cyst anteriorly. Such an opening, too, will enable us to see the bottom of the cyst, and remove with facility any foreign bodies or bands which may traverse this tumour, and which, if left behind, are calculated to cause a recurrence of the disease. In many cases, no doubt, the cysts are found much thicker than in any of the cases Mr. A. has met with; but he is strongly inclined to believe that in all cases the cyst will be absorbed if the plan of free incision and subsequent mode of dressing here recommended be adopted.

ETHNOLOGICAL SOCIETY.

April 29, 1846.

Sir Charles Malcolm, President, in the Chair.

Mr. W. S. Featherstone, Esq., Henry Hallam, Esq., and Frederick Bower, Esq., were elected fellows.

The paper read was entitled—"Observations on the Indian Tribes inhabiting the North West Coast of America, by John Scouler, M.D." Under this title Dr. Scouler has given a classification of the various tribes found between Behring's Straits and the Columbia River, and included between the Rocky Mountains and the Pacific Ocean. They are sixteen in number, which is very considerable for the narrow district within which they are confined. To the east of the mountain range, the Algonquin race alone occupies a territory exceeding that of the sixteen families mentioned. Even if we exclude the Esquimaux, we find there is a considerable variety in the physical features of the Indians of the north west coast of America, as well as in their intellectual and moral character. Comparing them *en masse* with their neighbours east of the Rocky Mountains, they have a more extensive range of ideas, are less inflexible in character, and more imitative, and, instead of the hard-heartedness of the Iriquois, the ferocity of the Carib, or the impassable cruelty of the Brazilian, are truly humane: the custom of scalping is unknown; prisoners taken in war are rarely put to death after the excitement of the contest has subsided, and they are never exposed to lingering tortures. The elaborate carvings of one of the sixteen families—the Haidah—is, in Dr. Scouler's opinion, equal in skill to any thing displayed by the Mexicans, and shows how small an amount of civilisation might suffice for the construction of the monuments of Chiapa or Yucatan. The Flat Heads, Cayuse, and Shahaptans are remarkable for their moral character and religious culture. Long before the arrival of Christian teachers among them, they had learned to observe Sunday by spending a part of it in prayer and religious ceremonies, and by setting aside their usual labours. The paper was full of learning, and called forth observations from Dr. Latham and Dr. King, who have devoted themselves of late to the history of man in that part of the world, and whose valuable researches have already been the subject of comment in the *Medical Times.*

REVIEWS.

Spinal Affections, and the Prone System of treating them. By James Coles M.R.C.S. &c. Post 8vo. pp. 320. London: Houlston and Stoneman, 1845.

This work consists of a practical exposition of the advantages of treating various spinal affections, both acute and chronic, by the prone position, as first suggested by Dr. Verral in 1823. In the hands of that able practitioner, the system succeeded admirably, and not unfrequently in cases which had previously resisted other methods of treatment. Since his time, the plan has been more extensively carried out, and especially so by the author of the volume before us, who has contributed many improvements to the original mode of practice. The book embraces a simple, but intelligible, anatomical and physiological comment upon the spinal column and its contiguous structures; a description of the varieties and causes of spinal distortion, with a consideration of the influence it produces upon the general health of the sufferer; a summary of the different means used aforetime, and at present, for the relief and cure of these painful affections; a minute description of the mode of employing the prone system, and a selection of cases illustrative of its beneficial effects. The work contains a great deal of useful information of a practical nature, and occasionally displays a very creditable amount of research. It is especially calculated to be of use to the general reader, but the medical practitioner will find much in it that he may consult with advantage.

We cannot, however, close the book, without noticing two extraordinary errors contained in it—and they are the more extraordinary because of the contrast they furnish to the better material they mingle with. In a foot note at p. 224 we are informed that "the father of spine stretchers was Dr. Procrustes, an eminent physician in the ancient times of Greece, and we are told that when that great man met with a patient more crooked, or shorter than he, the doctor, thought he should be, he laid him upon his own bed which he had invented, and stretched him until he became of the exact length which he had determined that he should be."

What Mr. Coles can have been doing to let his brains run riot in telling such "a tale of a tub" as this, we cannot imagine. At any rate we must give him credit for being more familiar with surgery than with classics. Lest he should ever repeat this strange story, we beg to inform him that his distinguished physician—*torvus Procrustes*, as Ovid happily calls him—was no doctor at all, but a highwayman who scared all travellers away from his particular territory: hence his name, Procrustes, ἀπὸ τοῦ προκούειν. This said distinguished individual, besides deserving the honour awarded to him by Mr. Coles, of having invented the stretching system for curing deformity, and promoting growth, also invented the summary plan of shortening limbs that were too long, by simply lopping off as much as was exuberant. So that though he was not a practitioner, properly so-called, in surgery, he was an excellent operator, and immortalised both himself and his bed by the extent with which he treated his "patients."

At p. 243, "Hippocrates," says our author, "relates that the Scythian women seared the right breast, that the arm on that side might grow in strength." On consulting the old Coan, we find him saying that at certain seasons of the year, the humidity was so great in Scythia that the juices of men would not dry up fast enough, and they became soft and smooth-skinned, and resembled women—sed propter pinguedinem, et carnis glabritiem, forma inter se sunt similes. To avoid this *likeness*, the *men* used to have their breasts burnt, that the humidity might be dissipated. The only *women* who had their breasts burnt off were the Amazons—they parted with the right organ, that it might not interfere with the motions of the arm in using the bow or the javelin.

A Manual of Natural Philosophy: with Recapitulatory Questions on each Chapter, and a Dictionary of Philosophical Terms. By J. L. Comstock, M.D. and R. D. Hoblyn, A.M. Foolscap 8vo. 1846. London: Adam Scott.

This work is, for the most part, a reprint from the American one published by Dr. Comstock. It has the advantage of the able editorship of Mr. Hoblyn, who, besides having elucidated several parts, in the otherwise excellent original, has also supplied much new matter on the subject of heat and the steam engine. As the manual now stands, it presents almost everything, both diagrammatic and descriptive, that the student can want in an elementary investigation of the physical sciences, both in their common and their complex forms. The illustrations are particularly easy and intelligible, and the text perspicuous and simple, and yet, not wanting in profundity, when elaborate details are called for. We have derived much pleasure and profit from a perusal of the volume, and we gladly introduce it to all whom it may concern, as a most excellent digest and summary of the more important, as well as of the popular, truths of natural philosophy.

Diluvii Testis.—Dr. Albert Koch, it is stated, has discovered a colossal skeleton of the fossil reptile, called the basilosaurus by M. Harlan. It is one hundred and four feet long; the solid portions of the vertebræ are from sixteen to eighteen inches long, and from eight to twelve inches in diameter. This monstrous reptile was carnivorous; the eyes were large, and projected in front of the head; the limbs were in the form of oars, and were small in proportion to the size of the animal, although doubtlessly sufficient to direct the body of this enormous animal through the waters, of the rivers and seas, which he frequented. Every thing proves that these animals were very numerous in the seas, bays, and estuaries, which formerly occupied the entire country now covered by the tertiary formations of Alabama.

TO CORRESPONDENTS.

M. D. *is certainly liable. We doubt, however, the intention of the Apothecaries' Company to prosecute in such cases.*

M. R. C. S. London, *mistakes entirely the value of a purchased German diploma. It neither carries weight nor increases the respectability of its possessor.*

L. W. R. *guesses rightly.*

S.—*The next examination at the Royal College of Physicians, London, will take place when a sufficient number of candidates have entered their names for that purpose. S. will find any further information he may require in our last students' number.*

We fear Amicus *does not sufficiently understand the puzzling question of medical reform. To frame a bill which will please all parties passes the skill of our best legislators.*

J. G.—*We really regret we cannot oblige our correspondent by giving an average. Such things vary much, and we are not aware of any statistics to refer to.*

An Old House Surgeon, and A Well Wisher to University College Hospital, *are thanked for their information. Our correspondents will see that we have fully treated the matter in another place.*

K. (Bath) *is recommended to inquire of the Post-office authorities. The fault does not lie at our office. K. mistakes in saying that his library only receives* one *volume of the* Medical Times *annually for his guinea. We furnish* two *for that sum—the two, at least,* equalling *in the amount, as well as value, of their scientific information more than twenty booksellers' volumes of half a guinea each.*

Amans *will oblige us by giving his name and address confidentially.*

Tyro.—*Our* Pharmaceutical Number *for May, now ready, contains a complete comparative table of the French and English weights and measures.*

A Navy Surgeon.—*Mr. Guthrie's lectures are delivered every Saturday, at 2 o'clock, at the Westminster Eye Hospital. A large number of gentlemen usually attend. We advise our correspondent to be early if he desires a good place.*

Dr. Rigby's *lectures will be resumed in our next.*

A Student.—*Dr. Clay's residence is Piccadilly, Manchester. Some of the numbers asked for are out of print, but we have reason to think that our valued correspondent—a practitioner of whom not only Manchester, but the provinces, may be proud—purposes to publish his numerous cases of ovarian extirpation (originally published in this Journal) in a separate form. The first case of ovariotomy performed in England was performed not by Mr. Walne, but Dr. Clay, and was remarkably successful.*

A Surgeon *need anticipate no change this session.*

W. S.—*The Journal named has notoriously fallen 50 per cent. in its circulation. Our correspondent may satisfy himself on this head by a reference to Messrs. Simpkin and Marshall, or Messrs. Longman and Co.*

A Poor Man *should consult a medical practitioner or become an out patient of one of the hospitals.*

Medicus *cannot do better than possess himself of Dr. Guy's volume on Medical Jurisprudence. The most elegant compendium on the subject in any language, and beyond question the best in our own. For the other work we think our correspondent should select that by Quain and Sharpey.*

THE MEDICAL TIMES is the only Medical Journal published at its own Office, and which is free from the control of all Booksellers and Publishers. Gentlemen may procure it by an order on any Newsman or Bookseller, or it will be sent direct from the Office of the Medical Times to Annual Subscribers sending by a Post-office order, directed James Angerstein Carfrae, or an order on some party in town. One Guinea IN ADVANCE, which will free them for twelve months. Half-Yearly Subscription, 13s; Quarterly, 6s. 6d. No number of the Medical Times can be forwarded, except to gentlemen paying in advance.

THE MEDICAL TIMES.

SATURDAY, MAY 9, 1846.

"'Tis the first virtue, vices to abhor,
And the first wisdom, to be fool no more."
IMITATIONS OF HORACE.

It would be little less than a miracle to witness any individual, or association of individuals, working out great social advantages, and winning the good opinion of all just men, without incurring the animosity and antagonism of envious and froward rivals. The brighter the glory of the sun, the darker are his shadows. Envy is the invariable attendant on merit; and the more deserving the object, the greater is the cause for detraction. The man that could silence Envy, would be a god—ay, more; for Envy has her exemplar in the records of heaven itself—in the defection and malignancy of the first rebel. It is, indeed, a truism which all experience confirms, that merit may often be measured by the amount of calumny that it evokes; as it is the pulse of reaction that often gives us the clearest estimate of the state of the patient.

Judging by this rule, the Committee of the National Association, and more especially the honorary secretaries, have, up to this time, acquitted themselves most honourably of the laborious duties which have devolved upon them in their responsible situation as advisers of their professional brethren. Never have men been more abused, or suffered more misrepresentation; but we trust that the promise of a more "substantial reward," dropped by the able Chairman of the Committee, at the recent public meeting, will be realised, and some compensation thus given, as a set-off to the long account of slander in which the Profession stand indebted to these gentlemen.

We have regretted, most deeply regretted, the dissonance of sentiment, and the vexatious disunion of policy, which have, during the whole of the agitation of the medical question, troubled, if they have not impeded, the labours of the enlightened leaders of this important Association. When we have believed that this opponency was honestly maintained by men of character, station, and ability, we have refrained from employing severity of language, or even from assuming a tone of reproof. Each individual is entitled to an opinion, and to a hearing; and we are ever anxious to encourage a fair and candid discussion of *every subject* whereon disagreements may exist. This has been, and ever shall be, the character of this Journal.

With a tenderness leading almost to error, we have given but little attention to the misdoings of the Associated Surgeons, except to treat them with that light ridicule which, to a sensitive mind, has all the bitterness and usefulness of rebuke, but to a callous heart is ineffectual for any good purpose. The errors that we have, from time to time, exposed, would have brought a blush of shame to the cheek of most men not utterly insensible to public opinion; but it appears that these half-dozen gentlemen, or some of them, either could not feel shame, or would be more ashamed to show it. Our last article, however, seems to have awakened in them a sense of public decency. Their usual weekly meeting was not held on Monday night, and probably both the Profession and public morals will be spared the discredit of their recurrence. We congratulate these persons on the prudent course they have so far taken, and, in the expectation of a full measure of repentance, we are as much inclined to give them a condonation for all their past offences as we may presume they are anxious to crave it. To show them that we are disinclined to inflict unnecessary punishment, and that forgetfulness of error is more congenial to us than reproach, we forbear, on this occasion, to give their numerous evil practices that exposure of which we last week gave them a pledge. We can scarcely doubt, however, that they are very willing that the pledge should be revoked, and that the debt stand over for future settlement. If we are in error, we have still the alternative to let the details accumulate, and pay all off in the lump.

We must, however, warn them, that if they persevere in assuming functions to which they have no legitimate claim, in deluding public opinion, in sowing discord broadcast over the Profession, our duty to truth and honour will require from us a rigid exercise of those judicial powers with which we are invested. Let us have no more announcements of "phantom breakfasts," for the entertainment of invisible guests, no more agitation of conventions from local Associations that never had an existence except on foolscap, and for whose delegates a set of bells would be a most appropriate ornament. These pretensions, this deceitfulness, this organised imposture of self-styled Committee-men, who have not an Association *with one single member* to support them, is sickening in the extreme to all who would not have the exposition of public opinion covered with ridicule and discredit. It is, indeed, intolerable. If the object of these people be notoriety, we assure them that they shall have a sufficiency, though, perhaps, the *distinction* will not be of the character they seek. They must remember that men can only reap what they have sown. With them, perhaps, it is a matter of taste, no more, whether martyrdom be in the cause of political unprincipledness or political virtue. *De gustibus non disputandum est. We* have a peculiar weakness in favour of honesty of purpose—a quality which experience would seem to show totally disqualifies us for some of the busy scenes of public life. At all events, it gives us no love of their's.

At the present juncture we have no patience for dissension, especially promoted through imposture. It is *no longer* a question whether the General Practitioners shall seek for the establishment of a new college, or for emancipation in the College of Surgeons. The time for such a doubt is gone by. The numerous demonstrations which the Council have made of their determination, and of which the recent oration, and the conduct of the Council thereupon, were among the most flagrant examples, have succeeded in chilling every hope even of the most ardent reformer who has the least practical acquaintance with the matter. No justice in that quarter *can* be obtained. The Council have torn away the mask, and the film has dropped from the eyes of the members. The truth, in all its glaring hideousness, is made visible. It is idle now for any set of individuals, were they as respectable and influential as those who head the National Association, to bridge over the chasm. The field of contest indeed is virtually abandoned; a random shot from some undisciplined malcontent may now and then be heard, as his party makes

its retreat, but regular warfare is at an end, and the Council of the College unquestionably stand victors over the scene. If they remain so, it will be the fault of the Profession. We must change our tactics; for it is the height of obstinacy and infatuation to continue a system of defence or reprisals which has on every occasion terminated in our defeat.

The National Association has suggested the only plan that can possibly be attended with immediate benefit; it is founded in the actual wants of the Profession, and will satisfy them; it is just in its principle, and will command respect; it is practicable in its policy, and will be crowned with success. As the great Lord Bacon has well said, "Let a man in the choice of his mean, rather choose the *fittest mean* than the greatest mean; and rather thos that deal in certain things, than those that are general." Generalities are, in fact, the toys of reason rather than the tools; they serve for show, for discipline, and for eloquent appeals; but they are commonly useless in business, and impede all rational progress and profit. Some men are constantly endeavouring to leap before they can crawl; their efforts are exceedingly ridiculous to the more judicious and experienced; but there will always be found men fools, and vain enough to become imitators.

Dicere quid si forte Jocosius, hoc mihi juris cum venia

A CERTAIN old man, who had lived an uncertain number of years ago, consoled himself, in the midst of his troubles, with the reflection that he was not single in them, and that he had probably no greater share than fell to the lot of his neighbours. This fellow was a philosopher, no doubt of it, and a practical one, too, or he would never have laughed at tribulation merely because he had plenty of companions in it. His propensity was a very happy one, to say the least of it; and was probably peculiar to him, which is saying the most of it; for we have never heard of an imitator of the maxim who has fared as well as its father. The good old philosopher, however, was decidedly in error, which might have been the fault of his organ of Comparison, or the fruit of a constitutional indifference to pleasure and pain. For had he fairly measured the joys and sorrows that were meted to him, in spite of himself, and contrasted these with the like visitations of his fellow-mortals, he would not have found the uniformity he fancied, but have discovered that fortune, like females, has her favourites, and that she smiles and frowns according to sundry hysterical freaks of her own, and not according to any set rules which might limit her vagaries. In fact, he would have discovered, as we have often done, that, whatever be a man's troubles, there are some that have less and others that have more than he, and, therefore, that there is no such thing as equality in the distribution of pleasure and pain to the human recipients thereof.

What holds true in particular, holds equally true in general, and we, consequently, find that there are certain avocations in life that are more or less free from annoyance than others. Here, now, is a case in point. Just as we were in the midst of this significant train of thought, we were summoned from the desk, at the command of a gentleman, who, having duly delivered his card, and declared his business to be important, was ushered into the consulting room. A gentleman, with his card, calling upon a physician, naturally suggested the idea of a patient with a guinea, perhaps with a couple—of course it was—what else could it be?—and we willingly threw down the editorial pen to take up its feathery companion, sacred only to prescription-writing. There was ink upon our fingers, and we carefully washed it off; our hair was ruffled, as an editor's ought to be when he is busy in thought, and we brushed it into orthodox regularity; boots were exchanged for slippers, and a "fan-tail" for a dressing-gown —and all to look as a physician ought to look in the eyes of a patient who sends his name in his card! When we encountered the welcome visitor, sure enough he had the air and ease of a gentleman, though considerably less of an invalid visage than we had hoped for. He rose and bowed at our *entrée*, reseated himself, blew his nose, coughed, crossed his legs, and made himself as much at home as any man could do who meant to pay a fashionable price for his freedoms. Of course, he was a patient, and liked a little preliminary before detailing his case; or he might be a little nervous, and affected this *nonchalance* the better to recover a certain portion of breath of which he had become a loser by our sudden presence; or he might be a very shrewd fellow, curious in conning human nature, and to read well our title-page before entering upon his complaint. These, and other such things, we thought in less time than we have taken to tell them; and, after duly marshalling to our aid pen, ink, paper, and stethoscope, fell back into the arm-chair in calm consequence, and waited for the attack. The onslaught was made, not by a patient, but by a petitioner—not upon one's knowledge and professional skill, but upon one's pocket—not upon the physician, but upon the man, in whose heart it was hoped would be found a sympathising and patronising regard towards a poor Pole—a nobleman, of course, in his own country, but here penniless and out of place. It is not necessary that we should go into further detail of what we did and what we said, when the fellow's impudence had fairly evolved itself, and dissipated the golden delusion we had cherished for half an hour—the reader will guess all about it when we tell him it is very unlikely we shall have any such visit from any such source again.

Now, would this *itinerant* have ventured a similar attack upon the charity of a tinker, tailor, blacksmith, or other creditable artizan? We opine not, for his discretion would have taught him that in such quarters his aristocratic mendicancy would have met with little toleration. Would he have made the experiment at the house of a nobleman, a member of Parliament, or a private gentleman of consequence? No; because the liveried lacqueys in waiting would have warned him that their master's time was not to be trifled with. Would he have gone into a lawyer's office with such cool effrontery? No; for the very audience might have cost him something. But a doctor was fair game, and there was no harm in hunting him. Whilst sufficiently respectable to be competent to give charity, he was not too much so to be beyond the reach of any adventurer who might ask it. His time was valuable enough to keep him at home in expectation of professional engagements, and yet not too valuable to be engrossed by an idle caller who did not care what quantity of it he occupied.

As all men have certain troubles, so all situations in life have certain inconveniences; and as some men have more troubles than others, so are some occupations unduly visited with nuisances. Physic is one of these, as the case above recorded can testify, and as every medical man's experience can corroborate.

In the eyes of mankind at large a doctor is a strange compound of consequence and insignificance—of importance and indifference—sought after with eagerness, and shunned without hesitation. He is made everything or nothing of—caressed like an angel, or cursed like an ogre, according as he may be conferring a service, or asking compensation for one. To solicit his aid is one thing; to reward it, is another—few care about the trouble they give him, and fewer still care to pay him for it. He is recognised as everybody's property—pillageable at option, like a piece of waste ground—with no tribunal to inflict a penalty for trespass. He possesses (thanks to himself) a title to charitableness, which the public are only too happy to avail themselves of:—his opinion is no expense to him, they think, and therefore they are unmindful how coolly they ask for, and how carelessly they regard it.

The facilities which the medical practitioner affords for gratuitously soliciting his advice, have furnished also the inducement for an unceremonious demand of his presence, that his pocket may be preyed upon the more easily. Ladies, wanting to see you very particularly, and as quickly as possible, obtain an ingress into your audience chamber, and directly that you give them the meeting, most likely at some inconvenience, present you with a memorandum book of subscribers to some charity you never heard of, at the same time politely asking the favour of your name, and perhaps of rather more ready money than at that moment you may be carrying about with you. If you commit all your available material into their custody, you are indifferently thanked for it, and considered as having done nothing more than, as a gentleman, became you. If you decline the charity, whether from inability or inclination to further it—no matter which—you are forthwith scouted as everything that is bad, and your good name does the penance of your presumption ever after.

Parsons, and laymen too, possess extraordinary facilities for attacking the benevolent side of the medical practitioner; but they take precious care to reverse the attention to him as seldom as possible. A clergyman whom we once knew—may we never know his like again!—living in a conspicuous midland town, in consequence of various *faux pas* in debt, dissipation, and debauchery, was obliged to give his church and canonicals the slip, and betake himself into obscurity, until the storm that had gathered around him had somewhat lessened in violence. A certain set of deluded followers, who believed him to be a saint, because, like Cantwell, he had cunning enough to conceal his inner man, set about pulling him out of every difficulty—debt amongst the number. They importuned his medical man to forgive him a bill of many years' standing, and then coolly asked him for a further gift in *bonâ fide* money. To both of these calls he responded, and the reward he got was, that neither the principal nor his prototypes ever employed him again, and the first favour he subsequently asked at their hands, they refused him! What would they have said of him had he excused himself from walking a couple of miles, when requested to do so for nothing, to see a patient troubled with toothache? How he would have been stigmatised as unfeeling, for not gladly running the shoes off his feet in a gratuitous attendance upon a pauper, whom the parson would object to bury without his customary fees!

A common nuisance amongst us, now-a-days,

is for a fellow, dressed decently, to send his name up to you, saying he wants to see you particularly; and when you give him the greeting, he has got some choice lead pencils, some superior clarified quills, some superfine writing-paper, or a book of particular cheapness to sell! And a precious *sell* it is to the poor practitioner who commits himself to the interview, in the hope of profiting by it. Upon no class of men is this impudent deceit practised so unsparingly as upon medical men. And why?—because they are believed to be so foolishly generous as to tolerate the impertinence, and even to pay it for visiting them.

The only sure way for our fraternity to guard themselves from an illiberal invasion of their time, their talents, or their treasury, is to estimate their work and condition by the scale proper to them, and maintain inviolate the honour which is their due. Once permitted to be invaded, that honour is at a discount, and it recovers not easily its intrinsic consequence.

The young practitioner is especially liable to be the dupe of the many artifices practised upon the profession. Let him start in life with the grand leading rule, that, if he fail to "put money in his purse," nobody will pity him when the hour of poverty comes. Those whom he has been ready to benefit in his days of prosperity will be the readiest to blame him when adversity makes him its victim. Let him never give, gratuitously, his advice to people who can afford to pay him for it. If he do, they will value his prescription at a straw, and then desert him for others who will rate their opinions at a more estimable price. Let him not make himself too cheap, but consider his presence, summoned, as a fee in perspective, and ask for it, even in the face of the intruder, having pompously come to seek alms himself.

THE GOWER-STREET SCHOOL.

THE educational establishment in Gower-street, at one time known as Stinkomalee University, at another as University College and Hospital, have never been highly estimated by public opinion. Justly or unjustly, the world never could be persuaded to connect with them anything that is supposed to carry distinction in reference to the *scholar*, or acceptance in reference to the *gentleman*. Professors and students have been overwhelmed with a common obloquy, and the pretending buildings—brick in Corinthian form, covered with dirty London plaster—half done—and that half ill done—have been conceived pretty universally to represent faithfully the genius loci in all its aspects—governmentally, administratively, and educationally. Even those who thrive and do well on its funds—which are less beggarly than their results would imply—have no efficient advocacy to offer. All confess, that considering its founders, its aims, and its means, a more wretched failure has not outfaced the age. It is the great educational "folly" of the time.

An illustration of the hospital management of the University College people is furnished by a correspondent in another page. The narrative exemplifies how happily the managers succeed in frustrating the two objects of their institution—in *not* imparting sound information to their pupils, and in *not* preserving the lives of their hospital patients. The one circumstance uplifts any deceptive veil that may have interposed between the hospital functionaries inside, and their supporters outside, and shows in frightful clearness how the hand of charity may be perverted into the instrument of a curse by official shortcomings and ill deeds.

That the poor woman was killed by the hospital officials is a proposition that will bear no dispute. Suffering from illness, she applied to them for a cure: they gave her death. For skill she met incompetence, and for health she got the sleep that endeth not.

Now, was this catastrophe a mere accident? Did it originate solely from individual oversight? Unquestionably it did not. The hospital has been for months managed deliberately on a system to bring about such catastrophes as their inevitable result. The management has in view these dreadful occurrences. They are, if not *objects* and *aims*, most certainly necessary *effects*. The affair is *systemed* to produce them.

What are the facts of this extraordinary management? The pharmacy of the hospital is in the hands of a *pupil!* And what sort of a pupil? A *two year old student!* What are his previous qualifications? None. What are his opportunities of making his pharmaceutical *experiments*—for such they are—on the patients with some little carefulness and thought? Scarcely any—for he is going through the usual curriculum of study—pursuing the ordinary courses of professional lectures! He is too busy in learning surgery for the profits of another day, to be able to study pharmacy for the safety of the present. The neglect of his present duties is the *sine quâ non* for his fitness for the respectability of his future practice.

But he has assistance? Certainly. The pupils who are in the same position with himself, pay to be taught by him what he does not know. Costly sums are given as the title-deeds to a knowledge that does not exist. These high-paying, well-treated gentlemen *aid* their pupil-master in his pharmaceutical responsibility, adding to his ignorance the benefit of their own. In other words, the dispensing of the Hospital drugs is divided among half-a-dozen gentlemen, who, in the same way that Gil Blas' revered uncle learned to read his breviary in the process of teaching his nephew to spell, acquire the art of pharmacy by first essaying the perils of practising it. Instead of learning, and practising, and teaching, the Pharmacy Class of this Hospital have the novel system forced on them of teaching in the first place, and then practising, and finally of learning. The innovation is bold; that it is not quite safe, the death of the poor woman noted by our correspondent is monumental evidence.

But, apart from the pharmaceutical assassinations which this lax and barbarous system, or rather no-system, of medical attendance must be ever and anon perpetrating, what shall be said of the fairness—the propriety—the decency—the common honesty, of taking *large* fees for instruction in pharmacy, when the instruction is of the character we have under such painful illustrations adverted to? What is the explanation that can be offered to the deceived, the bubbled parents—or to an indignant public—both periodically appealed to on the Institution's behalf, as though its perfection out-paragoned belief? We say deliberately, that the tragical calamity we have recorded, originating in a system of management so palpably defective and wrong, throws a solemn responsibility on the rulers of this Institution; and that the public has a right to have vindicated, in the proper quarter, the injury and discredit it has thus ruthlessly been made to suffer.

AN UNFORTUNATE JOURNALIST.

ONE of our contemporaries—a medical journalist—has been indulging, very lately, in an angry lamentation, because deemed useless as an advertising vehicle, by the Committee of the National Association. The Committee called a meeting, and thought it useless towards getting a full assembly, to advertise in his journal. He is therefore not at all pleased that a hundred respectable and able Practitioners of the Metropolis and its vicinity, who know so well the *media* by which there is any chance of communicating with their professional brethren) think that the *Lancet* has now ceased to be worth the expense of an advertisement; and, very foolishly, he vents publicly in wounded rant the anger which this slight on his powers of publication provokes. One impolicy of this fit of grumbling consists in the fact that we are tempted by it to remind our contemporary of a pithy circumstance, very significant of the judgment and discretion displayed by the Association in their contemptuous neglect of him. *The Great Meeting of the "Associated Surgeons" was advertised in the* Lancet, *and not in the* Medical Times: THIRTEEN PERSONS *attended it! The Great Meeting of the National Association was advertised in the* Medical Times, *and not in the* Lancet, NEARLY ONE THOUSAND GENTLEMEN ATTENDED IT! If we would add one word more, on the question of journalist influence, it would be this:—the *Lancet* supported the "British College of Medicine" (the predecessor of Morison's), *and it is dead:* the British Association, *and it is dead:* the Medical Protection Assembly, *and it is dead:* the Princess's Theatre Association, *and it is dead:* the Committee (!) of "Associated Surgeons," and it is (if not dead, worse) *disgraced and routed.* Whatever it has opposed in the Profession has triumphed; whatever it has supported has failed. Our unfortunate contemporary, thus notorious to the public by want of influence as of circulation, must not be too sensitive to the slights of the advertising community, or he will have little else to do beyond the irritating task of resenting them. It has been sensibly said, that advertisements, the last things to come to a journal, are the last to leave it; with these impolitic murmurings, it is easy to see that our contemporary will soon be bereft of these—his last—supporters.

MISCELLANEOUS CORRESPONDENCE.

CASE OF POISONING AT UNIVERSITY COLLEGE HOSPITAL.

[To the Editor of the Medical Times.]

SIR,—I send you the following particulars of a recent case of poisoning in University College Hospital, with a few remarks on the internal *economy* of that institution:—

Ann Bridges, aged sixty-six, was admitted into the University College Hospital, under Mr. Quain, in the beginning of April last, labouring under gangrene of the right foot. She was placed in No. 5 ward, and did well up to the night of Tuesday, April 28th, the mortification being arrested, and the dead parts separating. It appears that on the night in question a draught containing three-quarters of a grain of muriate of morphia was ordered for her, as on two or three previous occasions. This was administered by the nurse of the ward, about nine o'clock, as usual. The patient shortly after expressed herself "very comfortable," and went to sleep. A little before 12 p.m., the night-nurse on duty was attracted by the patient's difficulty of breathing; she attempted to rouse her, but could not succeed, and in conse-

quence summoned the head-nurse of the ward, who immediately suspected the patient to be labouring under the effects of an overdose of opium, and called the resident medical officers. Some of th gentlemen immediately attended, and used every available remedy by means of stomach-pump, galvanism, &c., to save the patient, without success. She never recovered from her insensibility, but gradually sunk and died, about six o'clock on Wednesday morning, nine hours after the composing draught.

Vague rumours having got into circulation respecting this case, an inquest was summoned to be held at the hospital, before Mr. Deputy Coroner Mills, on Friday, the 1st of May, at the early hour of nine a. m., when the following facts came out in evidence.—

1. The draught ordered for Ann Bridges was taken by the nurse from a store bottle of solution of muriate of morphia kept in the ward. This solution ought to have contained one grain of the muriate to one ounce of fluid.

2. This bottle was emptied on the morning of Tuesday, the 28th of April, and was returned half full from the dispensary with other medicines on the evening of that day.

3. The nurse, who had been a resident in the hospital six years, had invariably, when any "anodyne mixture" was prescribed for a patient, measured the quantity ordered in a graduated glass, from the "store bottle," precisely as she did on this occasion.

Respecting the manner in which the medicines were dispensed, it appeared —

4. That the resident apothecary and the pupils of the hospital were in the habit of dispensing all the medicines indiscriminately.

5. That on this occasion the anodyne-bottle of No. 5 ward, had fallen to the lot of a young gentleman who, according to the house physician was "*very competent*" to perform the duty, "being a matriculated student of the university of London, and having officiated in the dispensary upwards of seven or eight months."

6. This very competent gentleman had, on this particular occasion half filled the "store bottle" of No. 5 ward with a strong solution of muriate of morphia, containing *one grain of the muriate* to *one drachm of fluid*, and consequently of eight times its usual strength.

It appears, therefore, that the patient, instead of getting three-quarters of a grain of morphia in the six drachms of anodyne ordered, actually took *six grains of the poison.*

The paid *apothecary* of the institution was not summoned.

The foreman of the jury returned a verdict to the effect that "Ann Bridges had died in consequence of neglect by the administration of an overdose of morphia." This did not appear to suit Mr. Mills, however, and after a little consideration, he so twisted the verdict as to make it an entirely different sentence, omitting the word "neglect." The recorded verdict, signed by the jury, ran, as well as I can recollect, as follows:—"That Ann Bridges, being a patient in University College Hospital, suffering under mortification, died in consequence of an overdose of medicine, accidentally administered."

Several of the jury expressed their opinions, in no measured terms, that there had been much neglect in preparing the medicine.

A few words on the system of dispensing in University College Hospital, and I have done. You will be astonished to hear, Mr. Editor, that a second year's student is the *paid apothecary* of this hospital, and that he is at the present time *attending lectures* in the college opposite. Under this gentleman are numerous pupils, resident and non-resident, who pay fees of considerable amount for the privilege of *being instructed* in practical pharmacy.

You will ask, perhaps, how it is that a student, *a licentiate of no examining body*, is the *paid* apothecary? My answer is, the apothecary's wages amount to *twenty pounds a-year, board and lodging extra*, less, by one-half, than those of any gentleman's valet. You will allow, Sir, that no man who has completed his education will undertake to dispense for upwards of two hundred patients daily for the pittance of twenty pounds a-year. Although, so far as I know, this is the first occasion on which so serious an accident has occurred in this hospital, I have been credibly informed that complaints have been before made, on more than one occasion, not only of the inefficiency of the dispensing staff, but of that of some of the under nurses, towards whom the same spirit of wretched economy prevails. On this subject I may, perhaps, again have occasion to address you.

By making the above case the theme of a few remarks from your own powerful pen, you will, I am sure, render a service to suffering humanity.

I am, Mr. Editor,
Your obedient servant,
MEDICUS.

P.S.—I enclose my card, for your own private satisfaction, in token of the good faith of this letter.

THE SURGICAL FELLOWSHIPS.

(To the Editor of the Medical Times.)

SIR,—In an editorial article of your last number, the surgical profession is informed, or at least a certain portion called M.R.C.S.'s, upon what terms they will soon be able to buy a fellow's degree from the College of Surgeons, and at so reasonable a price as to defy all foreign competition. The worthy councillors who watch over *their* interests are about to rival Sir Robert Peel on free trade principles— Hurra, then, for free trade! The Giessen market for M.D.'s will be undersold and annihilated, for, doubtless, a thriving concern will be established on its ruins, by the sale of fellowships, wholesale and retail, Lincoln's-inn-fields; and the accomodating Dr. Bond soon be numbered with the things of the past. Can you tell yet, Mr. Editor, whether there will be different orders of fellows? Because I would suggest if there are any unfortunates who cannot afford to pay—and being M.R.C.S.'s *of good character*, they cannot with justice be denied the *honour*—these, I think, should be admitted free and titled "*poor fellows.*" There may be others who are able but too stingy to purchase the *honour*, and this batch I would also enrol free, and designate in their diplomas "*shabby fellows.*" The men who fully appreciate the value of the distinction, and pay their gold like princes, and ever after look down contemptuously on *mere* members, ought as a distinctive mark worthy of them, to be placed on the highest pinnacle of collegiate fame, and be styled "*noble fellows.*" Other titles indicative of various degrees of *merit* might be prefixed to the fellowship, but these are merely thrown out as hints to be improved upon by the governing body.

I am, Sir,
Your obedient servant,
AN "ODD FELLOW."

March 31, 1846.

APOTHECARIES, SURGEONS, AND BARBER-SURGEONS IN THE OLDEN TIME.

The following descriptions of the apothecary, the surgeon, and the barber surgeon, taken from a work published in 1717, about a hundred years ago, and entitled "a General Description of all Trades," will be read with interest at present, as the subject of medical reform, and the status of the respective members of the profession, engage so much attention. It will be seen that exactly one hundred years since, in 1746, the surgeons obtained their separation from the company of barber-surgeons. In 1846, they seek indirectly to drive from their body corporate, the general practitioners. In their former attempt they in a measure succeeded; the present generation of pure (?) surgeons has a wiser and better educated class to cope with, and they will be ultimately foiled in their endeavour.

APOTHECARIES.—"This is a very genteel business, and has been in great vogue of late years, there being, as has been computed, upwards of a thousand in and about London. There are in this, and indeed in most other trades, various degrees as to employ and extent. Some do little else but make up medicines according to the prescriptions of the dispensatory (compiled by the College of Physicians for their direction) and those of particular physicians, besides visiting their patients. Others not only prepare almost all kinds of medicines, as well galenical as chemical, but likewise deal in drugs; with all which they supply their brethren in trade, and so become a sort of wholesale dealers, as well as apothecaries. Others again practise surgery, man-midwifery, and many times even officiate as physicians, especially in the country, and often become men of very large practice, and eminent in their way. There is also another branch many of them fall into, which is that of curing lunatics, &c.

"A youth, intended for this profession, should be a pretty good scholar, and have a tolerable knowledge in the Latin tongue at least if, not some in the Greek, that he may be the better able, in due time, to see the opinions of the ancients for himself, who mostly wrote in those languages, as have also divers modern authors in the first of them. Though, it must be owned, there are almost innumerable helps in our mother tongue.

"The sums given with lads, going apprentices to this business, are from £20 to £300 according to the reputation and station the masters are in. And if a boy is of an affable, acute disposition, genteel, and well behaved, it will be so much the better.

"They have no set hours for business; but I have observed they are not the earliest at it in the morning, yet attend pretty late at night. And an apprentice at first must expect to do the lower offices about the shop, though they generally keep serving men, or boys, to go on errands, and do dirty work.

"A journeyman has, according to his capacity, from £10 to £40 a-year, and his board.

"For a person, who may be inclined to set up, £100 may do; but £200, I apprehend, will fit up a smart shop; besides which they ought to have somewhat handsome to support them till they get into a good set of patients.

"Their shops are liable to the visitation of certain persons, called *censors*, who are four fellows of the college, and have power to inspect whether the medicines they keep therein are good, and to destroy those which are not so.

"In London they are one of the city companies, and were first incorporated with the grocers in the year 1606, in the reign of King James I., but not alone till 1617: Livery-fine £16.

"Their hall is in the Black-friars (where they have two fine laboratories, out of which all the surgeons' chests are supplied with medicines for the use of the Navy;) and their court-day is on the first Tuesday of the month.

"They have also a handsome barge, in which, being finely ornamented, with colours flying and music playing, they attend the Lord-Mayor to Westminster, on the day of his installation, when he goes to be sworn into his high office."

SURGEONS.—"This profession is attended with more or less expense in proportion to the sum that is required with the apprentice, and the place he is to reside in. In large and populous cities the expense is greatest; as the apprentice, during his servitude, is expected to make a better appearance; and the master enhances his demand, as the apprentice has better prospect of business from a multiplicity of acquaintance at the expiration of his time, and greater opportunities of improving his understanding and learning. There is no fixing the sum they take with an apprentice; for some have £50, others £100, and so on to £400 or £500, according to the reputation they are in. The expense an apprentice is at during the seven years, in furnishing himself with clothes, washing, and pocket-money, may be about £200. To furnish him with instruments, medicines, and proper books, £100 more. This, I believe, is the common expense of a surgeon that sets out in the midway."

BARBERS, OR BARBER-SURGEONS.—Of the mode of business, &c., of these, our author gives an account, after which he proceeds: "In 1512, in the reign of King Henry VIII., others having assumed the practice of surgery, they obtained a grant, that none, except duly qualified, should follow that profession. Then the barbers were restrained from performing any thing more in

surgery than tooth-drawing, and the surgeons from shaving.

"In 1515, in the same king's reign, they were, as surgeons, exempted from all ward and parish-offices, as well as military services.

"In 1541, the practice of surgery, which before had been restricted, was laid entirely open for any one to follow as should choose it.

"In 1746, the surgeons, being become populous, in great estimation, and most of them wealthy, began to claim the pre-eminence over their brethren the barbers, and wanted them to separate and withdraw themselves from their mansion; but they maintained their ancient privileges, kept their hall, and caused the surgeons to separate."

GOSSIP OF THE WEEK.

Apothecaries' Hall.—Gentlemen admitted Licentiates on the 30th of April, 1846.—Henry Thomas Hartnoll, James Yates, Joseph Hesslegrave, Francis Robert Hoghton, James Parett.

A Dr. Forster is said to be carrying on experiments at present to forward the growth of barley by means of electricity, and he is reported to have obtained from a part of a field on which he operated more than double the quantity of barley from the same amount of seed, to that grown in another part of the field, on which the electric agency did not act. The electric apparatus employed by Dr. Forster is very simple; he buries an iron wire in the soil at a trifling depth all round the field or part of the field on which he purposes to operate, and connects it at either end with another wire stretched in the air from north to south.

In the medical profession examples are not rare of the attainment of extreme old age; yet as a class they bear the visible marks of health below the average. The registration of one year may be an imperfect index; but the mortuary registration for the year 1839 having been examined, to ascertain what was the average age of death of persons of the three professions, it appears that the average age of the clergymen who died in London during that year was 59, of the legal profession 50, and of the medical profession 45. Only one medical student was included in the registration; had the deaths of those who died in their noviciate been included, the average age of death of the medical profession would have been much lower. *Chadwick's Supplementary Report on Interment in Towns.* Mr. Chadwick's statement in this report is in accordance with the statistics afforded by Caspar, of Berlin; who, however, takes the average age of human life at threescore and ten, and the average age of medical men at 45. This fact affords a striking commentary on the non-appreciation of the services of union surgeons by the poor-law commissioners, and some other authorities.

A proposal has been submitted to the King of Denmark by the academical senate to give a considerable increase of salary to those professors of the faculty of medicine at Copenhagen, who are willing to abandon private practice, and devote themselves entirely to teaching. The measure, if adopted, must be injurious, as the knowledge of the professors, if restricted from gaining experience by practice, must be principal theoretical; at all events, the experience they may have had previously to becoming professors, not being renewed by continued practice, will be lost to them, and the public will suffer by the withdrawal of good practitioners, whose place may not always be worthily supplied.

Dr. Ernest Cloquet, formerly one of the professors of the Parisian hospitals, has just left Paris for Persia, to fill the offices vacated by Dr. Labat, as physician to the shah.

The *Gazette Medicale* states that M. Obeuma, a Swedish physician, has started the idea of congealing people and then at some future time restoring them to life. Thirty people have already submitted to the process, and among them a very pleasing young woman, who was desirous of retarding the ravages of time for a few centuries. The doctor, enchanted at his success, proposed to the government to congeal the entire Swedish army, in order to save the expense of their rations, &c., until the soldiery were wanted, and he then pledged himself to restore them to service. In vain, however, did the learned doctor expatiate to the soldiery on the riches they would possess when restored to life, by their pay being reserved for them; in vain did he show them the bodies of twenty nephews who had suffered themselves to be frozen, in order that they might wait the more patiently for their uncles' inheritance; the excited troops revolted, and pursued the unfortunate doctor until he took refuge in one of his own ice-wells, where he was discovered the next day in a state of congelation. As his secret of thawing a man without danger is not known, it has been wisely decided to leave him in that state until the necessary information has been obtained. He bids fair, therefore, to remain congealed to the end of the world.

A. M. L. —— accused of practising medicine with a false diploma, was summoned to attend before the magistrate, and answer the charge. He refused to obey, and the gendarmes were sent to compel his attendance. When they arrived he was in bed, but rose at once, dressed, and wrapped himself up in a cloak as if prepared to follow the police; instead of which, however, he stabbed himself in the abdomen, and fell desperately wounded. When the gendarmes approached to render him assistance, he seized hold of an edge of the wound, and cutting off a slice, gave it to the brigadier, and said, "that's all of my body you will have to take to the king's solicitor." He was then placed in bed, and died soon after.

The Grand Seignior has recently ordered that the bodies of the female slaves who die in the markets shall be given up to the students in medicine for dissection. This is a great step in advance.

The government of Wirtemburg is adopting measures to diminish the amount of cretinism in that country. There are at present 2,901 cretins in Wirtemburg, being at the rate of one cretin in every 500 inhabitants; 1,193 of these are between the ages of fifteen and thirty years, 939 are more than thirty years old, and 769 under fifteen.

Plica polonica, it appears, is one of the diseases caused by a vegetable product. Professor Walther, of Kiew, on examining the matter which unites the diseased hair under the microscope, ascertained the presence of an infinite number of small round or oval corpuscles, having one or two nuclei in the centre, which seem to be the germs of other corpuscles. These researches confirm in a great measure those of Gunsburg.

South Staffordshire General Hospital.—The committee for managing the erection of this institution have accepted a tender to the amount of £8025, for the erection, the whole to be completed by Michaelmas, 1847. The furnishing, fittings, &c., will be ready by January, 1848, at which time it will be opened for the reception of patients.

Academy of Sciences, Paris.—M. Sedillot has just been elected a corresponding member of this institute, in the section of medicine and surgery.

Provincial Medical and Surgical Association.—The anniversary meeting of this society will take place at Norwich. The time is not known.

It is stated, in the *Gazette Medico-Chirurgicale*, that Dr. Arthault has invented a lithotritic instrument, by which he is able to reduce a calculus in the bladder to an impalpable powder in three minutes. He operated in this manner on a dead body at the Hopital Beaujon, in the presence of Dr. Laugier, Dr. J. B. Durand, Dr. Tavignot, Dr. Delaroque, jun., and Dr. Gariel, and was apparently entirely successful.

Royal College of Surgeons.—At the last meeting of the court of examiners of this college, the following gentlemen were admitted members, viz., Messrs. H. Gardner, S. Lowe, H. H. Harvey, W. P. Ward, A. Jowett, C. G. Ellis, H. Pritchard, J. T. Arlidge, and T. G. Wrench.

Dreadnought Hospital Ship.—The funds of this excellent floating hospital for the relief of seamen of all nations, have just been increased by a donation of 900 dollars, or about £190, from that enlightened personage Keying, the High Commissioner of his Imperial Majesty the Emperor of China. This munificent sum was presented through the hands of Rear Admiral Sir Thomas Cochrane, Naval Commander-in-Chief in China and India, to the treasurer of the hospital.

Appointments.—Surgeon: T. E. King, M.D., to the Constance. Assistant-surgeons, J. C. Buchanan, to the Constance; F. W. Sadler, to the Poictiers; Dr. Derriman, to Woolwich Dockyard.

Obituary.—On the 29th ult., at Cavan, Ireland, Thomas Heslop, M.D., late of Durham-row, Stepney, aged 40.

King's College.—We are happy to hear that a new hospital is to be built for this prosperous college on a new and very eligible site. The removal from the present locality—the hospital overhanging a crowded burying-ground—was early suggested by our indefatigable friend, Mr. Walker, who originated the public movement against intra-mural interment, and has been frequently and urgently called for in the pages of this journal. We congratulate the heads of the College, as well as the public, on the very salutary improvement. The College cannot but gain by it.

M. Tanchou, in a pamphlet published in defence of the electrical impostor, Angélique Cottin, refers the phenomena she exhibited to electricity, and he undertakes to prove that the *substitutions, chemical combinations, digestion, nutrition, respiration, the eliminatory functions, conception, and even the difference of the sexes, and the resemblance between children,* are all the results of electricity. We thought Faraday had carried the investigations respecting electricity and its powers further than any other observer of the present day, but his labours sink into nothingness beside the brilliant discoveries of M. Tanchou. Even Harvey himself appears a fool by the side of the French electrician.

Small Pox.—At a meeting of the Norwich Board of Health on Monday last, the Bishop of the Diocese in the chair, it was stated that the number of deaths from small-pox from September 1st, 1841, to March 1st, 1845, amounted to 266, and that it had been ascertained that one-eighth of the persons attacked with small-pox die. There was reason to believe, during the same period, no less than 2128 must have had the disease; it also appeared that, amongst the poor and destitute, one in seven attacked by the disease died, and, therefore, during the period above stated, there had been 1148 cases of small-pox among this class. This mortality, it was stated, was caused by the neglect of the parents in not availing themselves of the blessings of vaccination. From March, 1841, to February, 1845, inclusive, 1680 children of the poor had been vaccinated gratuitously.

MORTALITY TABLE,

For the week ending May 2, 1846

Causes of Death.	Total.	Average of 5 summers	Average of 5 years
All Causes . . .	831	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	123	162	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	79	98	101
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	111	155	157
Diseases of the Lungs, and of the other Organs of Respiration	288	271	294
Diseases of the Heart and Blood-vessels . . .	26	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	60	65	72
Diseases of the Kidneys, &c.	7	7	7
Childbirth, Diseases of the Uterus, &c.	14	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	10	6	7
Diseases of the Skin, Cellular Tissues, &c.	2	1	2
Old Age	35	60	67
Violence, Privation, Cold, and Intemperance .	41	25	26

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

(From our own Correspondent.)

ACADEMY OF SCIENCES.

Meeting of the 4th May, 1846. M. MATHIEU in the Chair.

COMPOSITION AND NUTRITIOUS PROPERTIES OF COFFEE, BY M PAYEN.—M Cadet de Vaux and M C de Gassicourt fancied they had discovered in coffee gallic acid, a resinous substance, albumen, an aromatic essence, and mucilage; these substances present, however, only doubtful analogies with the well-defined elements of coffee Caffeine, discovered by Runge, and described by Robiquet, is a crystallisable and azotised body, easily sublimated into white brilliant crystals, and appears identical in nature with Theine, since detected in tea leaves Robiquet, besides, described with precision the effect of torrefaction on coffee The researches of Liebig appeared to show that coffee contained in reality but little or no nutritious matter; and M Payen, on the contrary, endeavours to demonstrate that the infusion of coffee contains several azotised principles, in quantity equal at least to ten times the amount admitted by Liebig; and that saline and fatty substances, of a nutritious nature, may also be therein detected According to M. Payen, the most remarkable of the immediate principles of coffee had not hitherto been discovered—a fact which is accounted for by the extreme facility with which that principle is altered by chemical operations Its most interesting alteration consists in the production of a fine green colour, which betrayed the presence of the unknown substance to M. Payen, and led to its separation in the shape of a white crystalline matter, which imparts a deep green hue to five thousand times its weight of water or alcohol M Payen has by experiment ascertained that torrefaction, according to its degree, removes from coffee 15 to 25 per cent in weight, and adds to its volume from 30 to 50 per cent. With regard to the nutritious properties of the infusion, M. Payen asserts that the infusion of 100 grammes of coffee in 1000 of water contains 20 grammes of nutritious matter, three times more than the same quantity of tea, prepared with 20 grammes to 1000 of water If milk be added to it, the result will contain six times more solid matter and three times more nitrogen than broth.

ACADEMY OF MEDICINE.

Meeting of May 5th, 1816; Dr. ROCHE in the Chair.

THE PLAGUE AND QUARANTINE QUESTION.

A letter was read from Dr. Aubert-Roche, communicating the intelligence received from Dr. Bowring, M P., that the House of Commons had ordered the translation into English, and the impression of the Report on the Plague

Another letter was read from Dr. Gaëtani-Bey, stating that in a conversation with Mehemet Ali, that prince had expressed much anger at finding that, notwithstanding all his efforts for the improvement of Lower Egypt, that province was still pointed at as the chief focus of the plague. After some discussion on the subject, the Pacha at last expressed himself convinced of the correctness of the assertion, and ordered that a sum of 50,000 purses be consecrated to the amelioration of the villages inhabited by the fellahs.

M. Prus then proceeded to read the practical conclusions of the Report on the Plague. The sanatory measures necessary to the security of France might be classed under five heads:—1. Indication of the countries from which the plague may be imported; 2. Precautions to be taken by ships leaving such countries; 3 Rules to be observed during their passage home; 4. Precautions to be taken on their arrival in French ports; 5. Measures to be adopted in case of the outbreak of the plague in France.

Sec 1.—The countries from which the plague may be imported are Egypt, Syria, and Turkey in Europe and in Asia. The regencies of Tripoli and Tunis, and the empire of Morocco, must also be attentively watched. It is not necessary that the sanitary precautions should be equally rigorous at all times of the year. Thus the fear of importation of the plague from Egypt into France may be almost altogether abandoned from the 1st of July to the beginning of November, experience having proved that the Egyptian epidemics have always broken out between November and February, and have always been arrested before the end of the month of June.

Sec. 2 - It is evident that those lands from which danger may be apprehended should be submitted to constant medical observation. For that purpose, French physicians shall be appointed to reside in the various countries in which their presence may be judged necessary. Their duty shall be to visit the ships in port, to return official information to government of the sanitary condition of the country, and to collect as many documents as possible relative to the plague. The above-named medical officers shall deliver a foul bill of health when a pestilential epidemic shall exist in their residence For all other cases the certificate delivered to the captain shall be a clean bill of health. The physician shall not only mention in the bill the sanitary state of the port from which the ship sails, but he shall, moreover, go on board, examine the passengers and seamen, and the hygienic conditions of the vessel; all which operations shall take place on the day previous to, or the very day of, weighing anchor. The permission hitherto granted to captains not to sail for six days after the delivery of the bill of health, renders that certificate perfectly nugatory. If it were true, as the researches of the commission appear to show, that the clothes and goods of pestilential subjects cannot communicate the disorder, it is evident that no peculiar measures need be adopted relative to them; but the commission is of opinion that in this matter it is best to act with due circumspection provisionally, and until further experiments have proved the innoxious nature of contaminated goods, they shall be ventilated during their passage home; or the trunks containing the clothes and linen of the passengers and crew shall be lead-lapped at the departure of the ship, and opened only in a French lazaretto.

Sec. 3.—All ships of the royal navy, and all the mail-packets coming from the Levant, shall have a physician on board, whose duty it shall be to keep a correct and circumstantial account of the sanitary condition of all persons on board, a special instruction containing the signs of the plague, its treatment, the measures best calculated to prevent the formation of centres of infection, &c., shall be placed by government in the hands of the captains of the ships unprovided with a physician.

Sec. 4.—On arrival in a French port, the bill of health and the diary of the physician shall be sent on shore and carefully examined by the medical officer of the port, who shall go on board, examine the crew, the passengers, and the ship, and report on their condition. The duration of the quarantine shall then be fixed by the competent authorities, after the examination of the bill of health, the diary, and the report. When the bill of health shall be a *clean* bill, and when the plague shall not have broken out during the passage, the quarantine shall last ten days from the date of departure. If the bill of health be a *foul* bill, the quarantine shall last fifteen days. The above regulations are applicable to the ships provided with a physician, all other ships furnished with a clean bill, and not attacked with the plague during the passage, shall undergo a quarantine of ten days from the date of arrival. The quarantine shall last fifteen days for the same ships, free from disease during the journey, but possessing only a foul bill, and the goods shall besides be landed. Any ship, whatever may be the nature of the bill of health, attacked at sea with the plague, or having on board at the time of arrival a patient affected with a complaint of a suspicious nature, shall undergo a quarantine, the duration of which shall be regulated by the sanitary authorities of the port. The crew and passengers of such ship to be confined in the lazaretto, for a period not exceeding twenty days, but not less than fifteen. The goods shall be landed and ventilated, the ship shall be cleaned, and must remain empty for one month at least; it shall be expressly forbidden to sailors, guards, &c., to go on board

Sec 5.—The patients affected with the plague have been hitherto treated in the lazaretto in a most unscientific and barbarous manner. The physician is forbidden to approach nearer than within twelve metres of his patient—a prohibition which the committee hopes in future will be raised. Other regulations, more in harmony with the rights of the patients and the feelings and habits of the physicians, must take the place of those rules hitherto in vigour, and which can no longer be permitted to exist. The commission proposes that all persons affected with plague, and received in a French lazaretto, shall be attended with the same care as the patients of our best hospitals. In case of death the bodies shall be dissected, and the minutes of the autopsy shall be signed by all present.

Sec. 6.—Should the plague accidentally break out in a French city, the patient shall be removed from the house of infection to a distant and well-ventilated place, where he shall receive the care he requires. The other inhabitants of the same house shall also be sent to another residence, where they shall be kept under the observation of a physician. The evacuated house shall be cleaned, and remain empty for the space of one month at least. Should several dwelling-houses be attacked, they shall be all treated in the same manner. The principle would remain the same if entire cities were attacked, and the measures above mentioned should be carried out with the utmost degree of severity.

ANATOMICAL SOCIETY.

Professor Cruveilhier in the Chair.

REPORT OF A CASE OF UTERINE TUMOUR CONTAINING ODONTOID OSSIFICATIONS; BY M. PIGNE.—If the ossifications under consideration be genuine teeth, the case must be one of extra-uterine pregnancy, or one of deformity of twins by intussusception. We will endeavour to prove that it belongs neither to the first nor yet to the second morbid degenerations, and that it is simply an ossified fibrous tumour. The cases of extra-uterine pregnancy described by authors, those contained in the collection of the Musée Dupuytren, and those which have fallen under our own personal observation, are 84 in number. In 15 of these cases, the fœtus had ceased to live so short a time before dissection, that none of the organs were modified in appearance by death. These 15 instances cannot therefore throw any light on the present preparation, and we must set them aside. In the 39 others the embryo or fœtus was 8 times desiccated, 7 times petrified, 4 times surrounded with a hard, solid crust, and 20 times in an advanced state of decomposition. 1. In the 8 cases of the first class the bodies were mummified, but had preserved their shape; the fluids had been taken in by absorption, and the solid parts had become porous and friable. The integument had the colour of parchment, and was perforated with numerous apertures of various size; all were contained in a thick cyst, frequently cartilaginous and sometimes ossified. 2. In the 7 instances of petrifaction of the fœtal body, it was completely saturated with calcareous salts, but had preserved the external forms of the human subject, being also enclosed in thick cysts. 3. The cases of the third class are perhaps the most interesting; of these four cases, the first had sojourned nineteen years in the maternal peritoneum, and was on all sides surrounded by a semi-calcareous and semi-ossified cyst. The full-grown fœtus was in a state of perfect preservation, and had not even lost the natural colour, flexibility, and elasticity of its parts. The brain was changed into a butyraceous mass, identical with fatty matter, and containing that substance first pointed out by Vauquelin, and called by M. Couerbe cérébrote. The same remarkable state of preservation was observed in the case related by Walther, in which the fœtus remained twenty-two years in the abdomen, in the fœtus observed by Camerarius (forty-six years), and in Nebel's case, in which the fœtus had been encysted fifty-four years. 4 Cases of putrefaction of the fœtus are too well known to make it necessary for us to insist upon the description of their characters. The tumour which has occasioned this report does not come under any one of the above divisions, and cannot therefore be referred to extra-uterine pregnancy. We cannot consider it with more propriety as one of gemellar intussusception, in which teeth or hair are often found. These tumours are always surrounded with a thick cyst, and contain a quantity of fat, in which are imbedded the teeth or hair. In the same cyst the *hairs are always of the same colour*. Their length may be considerable, and attain two feet, as observed by Blumenbach, or even three feet, as in a preparation of our museum. The teeth contained in such tumours are usually three or four in number, and sometimes more; they are well formed, and usually adhere to the cyst. Portions of bone (maxilla, face, pelvis, limbs) are occasionally detected. These tumours are not always situated in the abdomen, thus 72 instances have been published, 43 occupying the ovaries, 14 the peritoneum, 7 the testis, 3 the thorax, and 5 being attached to the arch of the colon. Such tumours appear to exist more frequently in the female than in the male subject; thus of the 72 cases above mentioned, the tumours were found 49 times in girls, and 23 only in boys. This difference cannot be attributed to confusion between gemellar intussusception and extra-uterine pregnancy, for many of these tumours were removed from the bodies of children; 5 were found in children not twelve years old; 6 in girls under two years; 4 in female infants stillborn, and 2 in fœtuses born one month before their time. In these cases it is quite evident that the monstrosity must be attributed to the reception of one child in some part of the body of its twin sister or brother. The teeth observed in such tumours are also always found to belong to first dentition. The portions of bone are arrested in their increase of size, but have continued their ossification; the epiphysary lines have disappeared, and their eburnation is perhaps more complete than that of the adult bone. How can we account for the formation of such tumours? The reporter is of opinion that the following theory is the most correct: On examination of a large number of ovaries, one at least in every ten will be found containing Graafian vesicles so closely united together that the two cavities communicate with each other. Now one of these vessels cannot well be impregnated without its fellow being so at the same time, and both ovules must grow together united in *one* common envelope. But if the development of one germ progresses with more rapidity than that of the other, the latter will inevitably become incarcerated in the first developed orga of the former—i. e., the heart and the corpora Wolfiana, which preside more particularly over the formation of the ovary, testis, and colon. In these organs, therefore, will the reception most commonly take place. This was the opinion adopted on the subject by Dupuytren, Osann, and Prochaska; Hufeland refuses to admit it. The case presented to the Society presents none of the characters belonging to the tumours we have described; it is an ossified fibrous tumour of the most common description, and it is a matter of some surprise that any doubt should have ever been entertained as to its real nature.

HOSPITAL NECKER.

CLINICAL LECTURE ON DIARRHŒA OF INFANTS; BY PROFESSOR TROUSSEAU.

The influence of the change of seasons is very strongly felt in hospitals destined to infants. During the course of the winter a numerous series of pulmonary and cephalic disorders has passed before us; we are entering now into spring, and the coming heat will bring with it intestinal affections. Soon, perhaps, you will not in one month meet in these wards with a single case of pneumonia, twelve or fifteen cases of which were admitted during every month of the winter. Thoracic diseases will be replaced by abdominal symptoms, and amongst these diarrhœa being the most frequent, the most difficult to treat properly, and the least understood, we will endeavour to prepare you beforehand for its observation by some remarks upon its pathology and treatment. The subject is extremely difficult, and although I have for eight years devoted myself to a daily study of the maladies of infancy, I feel myself in the dark with regard to many of its details, and do not therefore pretend to give you a completely satisfactory description, but merely to impart the little I do know of the matter. In order to introduce some regularity in the following remarks, we deem it necessary to establish a practical division between the various sorts of diarrhœa which are observed in children. We acknowledge only four primary forms of diarrhœa. 1, diarrhœa; 2, mucous diarrhœa; 3, lienteric diarrhœa; and 4, choleriform diarrhœa, or cholera infantilis. These forms are perfectly distinct from each other, and all the varieties of diarrhœa which may be observed in children, and which do not seem at first to have a place in our classification, will be found to consist of combinations of several of these original forms, or of deviations from these elementary types.

Causes.—Bilious diarrhœa may consist in a simple increase of the biliary and pancreatic secretions, or in a perversion of their qualities. Both may result from local irritation, but the first is often produced by mere physiological excitement. We will find a double illustration of these pathogenic influences, in the abundant flow of saliva determined by stimulation of the mouth with mercury, and in the increase of the secretion of tears caused by sorrow. Thus, slight inflammation of the stomach or duodenum will occasion a discharge of bile into the intestine; thus fear, anger, nervous excitement, in a word, will also produce an increase of the biliary, pancreatic, and sometimes the renal secretions. We may say we meet with daily examples of the great power of physiological stimuli on the conglomerated glands. The diarrhœa of the young soldier who goes into action for the first time, is another common instance of the same kind, a further illustration of which we find in the influence of dreams on the spermatic organs. Violent exercise, abundant perspiration in many persons bring on diarrhœa. In the water-cure, a method of treatment too advantageous in some diseases to be entirely left to quacks, we find that during the process of packing, if the patient is made to drink several tumblers of water, abundant perspiration is thrown out, but if diaphoresis does not appear, the mucous surface of the intestine substitutes its action to that of the skin, and relieves the system by diarrhœa. One of the most frequent causes of diarrhœa will be found to reside in the quality of the food. The presence of globules of colostrum in the nurse's milk, due, as Donné has proved, to latent irritation of the mamma, sudden weaning, the exhibition of improper food, are all circumstances by which diarrhœa may be occasioned in the infant. The habit of covering the child in bed with too warm clothing, is also a frequent cause of disease. This is unfortunately a habit very prevalent amongst the lower classes in this country. So many as four blankets are thrown child, who is besides enveloped in swaddling clothes; and to add to the child's comfort, the mother not unfrequently adds her pillow to his other clothing. Abundant perspiration is thus produced, and, without any regard for the consequences, the child is extracted from his bed to be suckled or cleaned, thus being exposed several times a-day to sudden changes of temperature, the result of which is pulmonary disease in winter, and intestinal derangement in summer.

Semeiology.—Bilious diarrhœa generally follows slight feverishness, and is often preceded or accompanied by vomiting. The mouth is bitter, the tongue foul, and the appetite absent. The colour of the motion varies from yellow to green, according as the biliary secretion is changed in its quality, or only increased in quantity. Its duration is from three to six days, and its termination favourable, unless the case is mismanaged. It is in fact a slight catarrhal condition of the mucous surface. Mucous diarrhœa is marked by the discharge of a new secretion from the bowels; it is often the consequence of the first variety of disease, or of indigestion. The nutriment acts as a foreign body upon the intestine, producing local irritation, and the excretion of a slimy mucus. This is a very common, and fortunately not very dangerous form. But when the irritation of the digestive tube is carried beyond certain limits, matters take a more serious aspect; enteritis sets in, and the products of inflammation are passed with the motions. Colitis occasionally makes its appearance, attended with intense pain, betrayed by cries uttered two or three minutes before the motions, with which a small quantity of blood is sometimes mixed, the dejections assuming a dysenteric character. When the small intestine alone is inflamed, our third form of diarrhœa, lientery, appears. In this variety the food passes unaltered through the digestive organs, and is recognisable in the dejections, in which grains of rice, vegetable substances, curdled milk, can be readily distinguished. This is an extremely dangerous derangement, on account of the impossibility of refection.

After one of the above kinds of diarrhœa, occasionally without them, the cholera of children—that almost invariably fatal affection—is observed to show itself. After dejections of a bilious or mucous character, the infant is suddenly seized with violent vomiting, against which the efforts of ar

remain unavailable. A watery diarrhœa of a greenish hue is at the same time discharged from the bowels, and alarming general symptoms are noticed. The eyes sink in the orbits, the features are decomposed, the complexion becomes livid, and the nose tongue, extremities, and even the breath, grow cold; the cry is acute, small, and incessant; the skin loses its elasticity, and when pinched in any part of the body, retains the folds made by the fingers, as if it were become an inert membrane. The child is sleepless, but without convulsions. Such are the first symptoms of this formidable malady. In its second period the vomiting, and sometimes the diarrhœa, cease, but no amendment follows. The collapse increases, and the infant almost invariably dies. We have, however, occasionally had the consolation of saving some few cases; one is at present in the wards, to whose case we called your attention, and who owes his recovery, under Providence, to the double tartrate of soda and potass.

Treatment.—We have found few drugs of any avail in the treatment of the bilious diarrhœa in children. It is a convenient plan to call the malady a gastro-enteritis, because the denomination leads to an invariable line of treatment, accessible to understandings of the meanest capacity. We take, however, a different view of diagnosis generally, and deem it unprofitable unless it leads to some practically useful indication. Some forms of diarrhœa are doubtless less difficult of cure than others, but we must say that the varieties we have described often combine with each other, so as to cause the practitioner no small embarrassment, and to reduce him, in many cases, to a blindfold empiricism; not but that we profess much respect for that empiricism which teaches us to exhibit mercury in syphilis, steel in anæmia, and bark in ague; but the empiricism we deprecate as a contemptible method is that which is not guided by diagnosis. The method we refer to may become a useful guide to the detection of the nature of disease, and it then acquires a considerable degree of utility. Let us remind you of a case of hemicrania at present in the wards. The attacks were periodical, and we tried sulphate of quinine without success; thus acquiring the knowledge that it was not governed by miasmatic influence. We exhibited then mercurial preparations, and the nervous headache having yielded at once, we were led to attribute the disease to syphilis. This is the empirical method we adopt, it is not the empiricism of *experiment*, but of *experience*. Thus, if we say that a patient is affected with neuralgia, we express a diagnostic opinion which is as elementary, and, let us add, as useless, as to say that he is affected with a corn on his foot; but it is quite another sort of thing to say that the patient is labouring under gouty, syphilitic, miasmatic, rheumatic, or chlorotic neuralgia, because this kind of diagnosis leads us to the real therapeutic indications. To return to the treatment of diarrhœa. Let us not forget that, to arrest the superabundant intestinal secretion is not by any means to cure the complaint which caused it. It is our opinion that bilious diarrhœa is only a very superficial catarrhal derangement of the intestine. The most efficient treatment consists in the exhibition of neutral salts, such as the double tartrate of potass and soda, phosphate of soda, Epsom or Glauber salts. We do not wish you to understand that we recommend the use of purgatives. No; castor oil and magnesia, or manna, you will usually find unsuccessful, whereas the neutral salts generally produce a speedy amendment. We have also derived benefit from the exhibition of the pulv. ipecac, at doses varying from two to ten grains, and mixed with a little jam, milk, or simple syrup. The action of this medicine is threefold: it is a substitutive, a discutient, and being a diaphoretic deviates towards the skin those vital energies which are occupied in the production of morbid symptoms in the alimentary canal. But when the bilious diarrhœa is the consequence of mere nervous excitement—when it is caused by fear or anger, as tears by grief, or salivation by appetite—opium gives relief in a very short time. In these cases, which you will find to be characterised by the absence of any sort of suffering during the first twenty four or thirty-six hours, the disease will speedily yield to the influence of hypnotic medicines. Half a drop of Sydenham's laudanum is a sufficient dose for a child under six months; others, it is true, will bear two or three drops, but that dose is too powerful a narcotic for the many. The laudanum should be dissolved in an ounce mixture, whereof the infant shall take a teaspoonful every three or four hours; but when the disorder has lasted beyond the specified time, opium ceases to possess its salutary effect, because the mere presence of the increased secretions on the mucous surface has sufficed to bring on an irritation which did not exist at first. Then we must again have recourse to neutral salts.

In mucous diarrhœa we have generally derived benefit from three sources saline purgatives, calomel, and rhubarb. The dose of calomel we recommend is one-fifth of a grain daily, mixed with half a drachm of sugar. This should be continued two or three days at furthest. As to rhubarb, it is the "syrup" we use, the so-called "sirop de chicorée"—a good preparation in everything but its absurd name, which insinuates the idea of the efficacy of the endive, which is, on the contrary, perfectly inert. Great attention should be paid to the child's diet; his food, less abundant than usual, should be chosen with great care. Milk is the most proper food for young children; fecula and broth also may be given after the expiration of the first year, and the drink should be in small quantity. In the choice of food the physician must also allow himself to be guided, in a great measure, by the idiosyncracy of the child, and the mother's remarks on the peculiarities of his appetite.

DAN. M'CARTHY, D.M.P.

Spain.

ANATOMICO-PATHOLOGICAL OBSERVATIONS UPON PHTHISIS.

By D. José Seco Baldor.

(Continued from page 92.)

CASE 7.—*Chronic Inflammation of the Pleura and Peritonæum, with Tubercles in both Membranes. Calculous Tubercles in the Lungs. Bronchial Glands Tuberculous. Acute Encephalitis.*

On the 17th of July, 1837, a soldier, in a state of great weakness and emaciation, was received into the Hospital of Saint Isabel. He complained of severe pain in the head; and exhibited signs of mental perturbation. On the morning of the 18th, he was found in a state of perplexity. He would answer no questions, and was occupied in rummaging the cupboard connected with his bed; and paid no attention to the attempts which were made to restrain and quiet him. The pulse, examined with difficulty, indicated no fever. Diet of rice; a demulcent decoction; twelve leeches behind the ears; blisters to the lower limbs. Evening, no better. Blood drawn by the application of two cupping-glasses from the neck.

19. Patient tranquil; but continued speechless and inattentive. Commencement of general paralysis. Laxatives, of antimonial wine.

20. Countenance destitute of expression. Eyes fixed, or moving involuntarily; pupils dilated, and, at times, immoveable. Diminution of the sensibility of the skin, and organs of vision, hearing, and smell. Paralysis of the muscular system, general, and equal in both sides of the body. Position supine; difficulty of deglutition; loss of speech, from morning of 18th. Bowels constipated, even with the antimonial wine. Evacuation of urine involuntary and unconscious. No distension of the hypogastrium. Pulse slow and weak. No increase of cutaneous temperature; hands and feet cold. Respiration slow, and, although obscure, perceptible in every region of the chest, which sounded, with natural clearness, on percussion. Sinapisms applied, in rapid succession, to the lower limbs and abdomen; blister to the nuchal region. Two grains of emetic tartar, in six ounces of *aqua melissæ*, and one of syrup of gum, to be administered by spoonfuls.

21. Less paralysis. The patient answered not, when spoken to; but opened his eyes; and once put out his tongue, which was clean, without deviation to the right or left. He raised, himself, both legs and the right arm, and both arms, having been elevated, sank by degrees, and not like inert bodies, as happened on the preceding day. Deglutition better. This morning the patient replied to the nurse by signals; but not during the physician's visit. The antimony had moved the bowels, and produced nausea. The blisters had taken effect; and the sinapisms imparted to the skin a livid-red colour, like that seen in typhoid patients, and in the depending parts of the dead body. Pinching excited no sensation. From the evening of this day, he continued to grow worse, and died at five o'clock on the morning of the 23rd.

NECROTOMY, THREE HOURS AND A HALF AFTER DEATH.

Head.—General induration of both cerebral hemispheres, with hyperæmia of the medullary substance, evidenced by the bloody points seen in it upon incision. Corpus striatum softened in the second degree, that is, in a manner appreciable by the eye, and of a reddish-grey colour. Half an ounce of serum in each lateral ventricle; the vessels of which were extraordinarily injected. The cerebellum, mesocephalon, and bulb of the spinal chord, not indurated.

Thorax.—Left pleura in a state of chronic inflammation. Tubercles in it and the right lung. Those of the lung hard, calculous, and more abundant in the vertex than the other parts. The bronchial glands of both sides semi-tuberculated. Bronchial membrane sound.

Abdomen.—Peritonæum red, inflamed, and exhibiting tubercular granules, of a fatty appearance. The omenta red, as well as very thick, and converted into a hard, in some parts, yellowish and fatty substance. Urinary bladder empty, dilated, and directed upwards.

REFLECTIONS.

This patient could supply no dates respecting the disease for which he had been admitted into the hospital, nor the chronic ailments whereby his state of marasmus had been induced. From the first visit, it was manifest that, in addition to the acute disease which affected the head, there existed some other, of chronic and formidable character. This was demonstrated by the dissection; which, at the same time, proved the existence of acute inflammation of the brain, indicated by the symptoms which the patient had previously exhibited.

We have, here, another example of tuberculous secretion in the pleura, consequent upon inflammation of that membrane, with the remarkable fact of the existence of a similar lesion of the peritonæum, resulting from a like cause. From the calculous hardness of the pulmonary tubercles, it may be inferred that they existed previously to the occurrence of the pleurisy and peritonitis. On the other hand, there is no other cause (than inflammation) to which they can be reasonably attributed, for, had they been of constitutional origin, they, instead of becoming calculous, would have continued to develope themselves in much greater number; and, after a certain time, part of them would have softened. As the patient came to the hospital in a state of exhaustion, and could give no information respecting his constitution or ailments, it is impossible to ascertain, with certainty, the origin of these tubercles, or that of the incipient tuberculization of the bronchial glands. No inflammation of the bronchial membrane existed to explain the development of this glandular lesion.

In this case, percussion and auscultation availed nothing. The reason of this was made obvious by dissection. The quantity of fluid effused into the pleura was too small to impair the respiratory murmur, or alter either the voice, or the sound of the thoracic parietes. The tubercles, moreover, were few in number, and widely scattered; and the parenchyma of the lungs sound. To this may be partly attributed the absence of cough. For, although not suffering from catarrh, the patient would have coughed if there had been many tubercles, and the pulmonary parenchyma had been, to a certain extent, obstructed.

CASE 8th.—*Chronic Inflammation of the Right Pleura, of the Bronchia, Pericardium and Peritonæum. Acute Inflammation of the Left Pleura. Tubercles in the Heart, beneath the Pericardium. Bronchial Glands tuberculated.*

A soldier was admitted into the Hospital of Saint Isabel, with pain in the breast, cough, thick mucous expectoration, dyspnœa, obtuse sound of all the posterior part of the right side the thorax, and

the inferior half of the anterior and lateral parts; but, elsewhere, clear. Respiration was, everywhere, perceptible, but obscure where the sound was dull. Mucous *râle* not very strong, in both sides. Pulse frequent; skin hot; evening-accessions of fever. Appetite impaired; thirst during the febrile paroxysm. Belly constipated, with occasional pains; nausea; vomiting; paleness of skin; debility; incipient marasmus.

The condition of the patient grew gradually worse. On the 7th of January, 1837, he was attacked with violent pain in the left side, and great dyspnœa. Pulse very quick, with loss of voice. Death in three days from the exacerbation.

NECROTOMY, ON THE MORNING OF THE 11TH.

Thorax.—The right costal and pulmonary pleura thickened, white, opaque, and covered with thick pus. More than a pint of clear pus in the corresponding cavity. Lung compressed by the fluid, but not inflamed. Left costal and pulmonary pleura, in many points, injected with blood; in others, covered with thick pus, or, rather, with purulent clots. In the cavity of this side, more than half a pint of transparent serum, with flakes of coagulated pus floating in it: the lung sound. The glandular bodies which surround the bronchia and larger vessels, increased in volume, and tuberculated. The bronchial membrane injected; exhibiting in various parts, spots of a dull-red colour, and covered with mucus like that which the patient had expectorated.

Heart and pericardium adhering together, so as to form one body. Indurated tubercles over the whole surface of the parenchyma of the organ, between it and the serous membrane by which it is invested. No tubercle in the substance of the lung.

Abdomen.—The whole peritoneal cavity, of a dusky colour, and extremely fetid. The different portions of the membrane adhering together, so that the viscera formed one body united to the abdominal parietes.

REFLECTIONS.

In this case, one mucous, and three serous membranes were the seat of chronic inflammation. The condition of the pleura, bronchia, and peritoneum, were recognized during life; but the inflammation of the pericardium was discovered only by dissection. This revealed, also, another lesion, the existence of which could not have been previously suspected:—the tubercles developed on the surface of the heart, beneath the (adherent) pericardium, doubtless, the result of pericarditis; as the tuberculated condition of the bronchial glands had been of bronchitis: for, had the tubercles been of a constitutional and primitive character, some would have been developed in the lungs or other organs, and not in the heart, where they are very rarely met with, even in those cases of tubercular diathesis, in which they are simultaneously developed in several organs of the same subject.

CASE 9th.—*Obstinate Quotidian Fever; Peripneumony; Bronchitis; Crude Tubercles in the left Lung.*

A soldier, belonging to the 17th regiment of the line, married, adult, of dark complexion, and well-constructed thorax, entered, April 16th, 1833, into the Military Hospital of Mompellier. For nineteen months, he had suffered from quotidian intermittent; which, yielding to no treatment, had greatly weakened and emaciated the patient. His skin was discoloured; his muscles flaccid. Every evening, the fever returned, with much flushing of the face, and severe internal pains, particularly in the left hypochondrium. This was considerably elevated by the extraordinary volume which the spleen had acquired.

For some days, no medicine was prescribed, but, at last, the sulphate of quina was administered with benefit. The paroxysms were more slight, the spleen diminished in volume; and everything conspired to induce a favourable result when, at the beginning of May, the patient was attacked with cough, dyspnœa, and continued fever. The quina was laid aside, and, on the 11th, sonorous and sibilous *râle* were detected, by auscultation, in the whole of the left side, and in the posterior and lateral parts of the right. Infusion of borage, with honey, a gummy potion: a blister to the left side.

From the 11th to the 16th, the dyspnœa greatly encreased. The patient experienced anxiety, suffocation, a sense of heat and oppression in the præcordial region, and invariably reclined upon the left side. Great thirst; and utter repugnance for food; and, on the 16th, profuse diarrhœa. On auscultation, the respiratory murmur was perceptible over the whole of the left side, except the internal part of the sub clavicular region; and bronchophony was clearly observed. The sound, on percussion, very dull, or utterly extinct, in the whole side. In the posterior part of the right, there were sonorous and crepitous *râle*, which somewhat obscured the respiratory murmur. In the remnant of this side, respiration was puerile; the sound clear over the whole. Milk-diet. Another blister to the left side.

17.—Crepitous *râle* in the left posterior region, with diminution of the dyspnœa. But profuse diarrhœa succeeded, with very frequent puls, and burning skin. Twelve leeches to each side of the thorax.

18.—The patient continued to recline on the left side, without being able to lie upon the right, from a sense of suffocation. Cough troublesome, with expectoration of a clear and slightly frothy sputum. Pulsations of the heart, strong, frequent, but circumscribed. Pulse (at the wrist) frequent, and almost filiform. Lancinating pain in the right axilla. Four cupping-glasses applied to that region; and six grains of squill with three of *digitalis purpurea*, made into four pills.

19.—Pain relieved. Respiratory murmur augmented in the whole right side, and in the internal part of the left sub-clavicular region; extinct in the remnant of this side. At three, p. m., great anxiety, orthopnœa upon reclination on the left side. Excessive heat, with profuse perspirations. Pulse very quick. Eight ounces of emulsion.

20.—Crepitous *râle* in the lateral and posterior part of the right side. Expectoration bloody, and more abundant than on the preceding days. Other symptoms unaltered.

21.—Crepitous *râle* in the right anterior and lateral parts: respiratory murmur extinct in the posterior. From this day to the 28th, the dyspnœa, sense of internal heat, thirst and diarrhœa, were aggravated. Pulse invariably small and very quick. Skin perspiring; and patient reclining on the left side. Death at nine on the morning of the 28th.

NECROTOMY, TWENTY-THREE HOURS AFTER DEATH.

Exterior.—Marasmus in the first stage.

Thorax.—Hepatization of the whole left lung, except the anterior border which was sound; and certain other small and ill defined portions, which, although affected with hyperæmia, were yet crepitous. The parts most hepatized, were the base and posterior border, and these contained some crude tubercles. The posterior half of the right lung also hepatized, especially below. anterior portion partly sound, and partly hepatized in the first degree. Both lungs strongly adherent to the diaphragm and ribs. Their root enveloped in a mass of enlarged, indurated, and dark-coloured glands. The bronchial mucous membrane red, wherever examined. Eight unces of yellow serous fluid in the pericardium. Heart flaccid and distended with coagulated blood in its cavities and larger vessels.

Abdomen.—The liver and spleen somewhat voluminous: surface of the latter corrugated. Left kidney double the size of the right; convex behind, and somewhat flattened anteriorly. Divers of the mesenteric glands, of the volume of a nut, and of ardaceous aspect and existence. The gastric mucous membrane generally pale, but, in some points, of a red or livid colour: the duodenal dusky. That of the jejunum and ileum, in five sixths of its extent, superiorly, of a slate colour bordering, in some points, upon violet: in the lower sixth portion, pale and sound. Cœcum much injected, and of a dusky-red colour. This injected state existed, also, in the colon; but gradually diminished as it approached the rectum.

REFLECTIONS.

In the last six cases, tubercles were found to have been developed in consequence of inflammation of the pleura, both in the pleura itself, in the false membranes,—the product of inflammation,—and in the pulmonary parenchyma. In the present case, the tubercles, discovered in the left lung, were, doubtless, the result of the inflammatory process: and the only difference is that here the lung constituted the principal seat of the inflammation, and, in the preceding cases, the pleura.

The cause of this pneumonia was apparently the prolongation of the intermittent fever. In the history of the chronic phlegmasiæ, other analogous cases may be cited which prove, like this, the importance of cutting short the febrile accessions, in order to avert the sanguineous congestion which, during their invasion, frequently attacks the viscera.

Once developed, the inflammation of the left lung travelled to the right lung, and corresponding pleura: and thus destroyed the patient, while the tuberculization was yet in an incipient state. Dissection confirmed the existence of inflammation in both lungs, and of sanguineous congestion, if not real inflammation, in the spleen, left kidney and liver, resulting from the same cause which had produced, in these organs, a notable increase of volume. The enlargement of the spleen seemed to diminish as the (febrile) accessions subsided, and, in fact, the rugæ discovered in its fibrous membrane, and the flattened condition of the anterior surface of the left kidney, proved that the spleen had, formerly, been more voluminous than it was found in the dead body.

(To be continued.)

England.

DISEASE OF THE MITRAL VALVE.—Mr. Russell, jun., describes the case of a man who had symptoms of heart disease for eight years. For the last three months the dyspnœa was extreme, and he could only breathe by placing himself on his knees and elbows, so that at last his elbows became quite sore. Before his death serum was effused universally and into the cavities. Dr. Fletcher examined him once, some time ago, and states that he then heard a rough bellows sound, most intense in the situation of the aortic valves, accompanying the first sound of the heart, and very superficial; but the sound did not extend up the course of the aorta, he was therefore puzzled to form a diagnosis, but thought there was either disease of the aortic or mitral valves. From the position assumed by the man, aneurism was expected. There was regurgitation into the veins of the neck. On examination, the veins were found very large; the lungs much condensed; no other disease excepting in the heart. All its cavities were distended with black blood, as were the veins and the aorta, to such an extent was the aorta loaded, that it was at first mistaken for the vena cava. Both the auricles were large, and their walls increased in strength; the superior vena cava was large; the right ventricle was dilated, and the walls were nearly double their healthy thickness; the left ventricle somewhat dilated, but not hypertrophied; the tricuspid and pulmonary valves healthy, excepting that the latter seemed even thinner than natural; the aortic valves were healthy, excepting that at the origin of those two which are connected with the flap of the mitral valve, there was a rim of firm half cartilaginous matter. The mitral valve was diseased; the disease seemed to consist in a deposit of very firm almost cartilaginous matter at the free extremity of the flaps, extending to the tips of the columnæ carneæ, matting together the chordæ tendineæ, which might be seen emerging in a healthy state from the upper portion, and spreading on the valve, and by coalescing from each valve, reducing the orifice to such an extent as only to allow the tip of the little finger to pass through. The flap towards the septum was quite healthy, glistening, and smooth, though thicker than usual; the other flap was more invaded by the disease, which might be felt terminating on it, by its thick edge; the flap was much shortened, but the chordæ were free, unlike those of the other flap, and quite healthy, though short. The lining membrane of the left auricle was opaque, but smooth, more particularly that of its outer wall. All the other cavities were quite healthy.

CARCINOMA OF THE RECTUM.—Dr. Fletcher describes the case of a female who died from carcinoma of the rectum, complicated with the same disease in the liver. On examination of the body the heart was found healthy; in the lungs there were cicatrices at the upper portions, and general adhesions of the pleura. Eight or ten nodules of carcinoma were found in the liver, varying from the size of a hazel nut to that of a large walnut

the pancreas and spleen were healthy; the stomach was healthy; the small intestines were distended and the large intestines very much so down t about the upper part of the middle third of th rectum, where the distention ceased abruptly, and where the intestine was found hard and contracted The disease occupied about the middle third of the rectum, where the coats were much and irregularly thickened, and the capacity reduced, so as to admi with difficulty the little finger to be passed into it Dr. Fletcher remarks that the cause of the complete obstruction in this case, as in other cases of mecha nical obstructions he had seen, was as much from the distention of the intestine above the contraction causing a valvular closing, as from the contraction itself.

Colchicum and Tobacco in Cardiac Neuralgia.—Dr. Fife, in the *Provincial Medical and Surgical Journal*, says that in cardiac neuralgia, he found colchicum especially useful, either with or without a few drops of the tincture of digitalis with each dose, when the action of the heart was much increased as well as irregular. A local application, in these cases, of great efficacy in relieving both the inordinate action and intense pain, is the tobacco leaf, slightly moistened and placed over the region of the heart, care always being taken to remove it so soon as any feeling of giddiness, faintness, or sinking, is experienced by the patient.

Malignant Disease of the Eye.—Mr. Page describes, in the *Provincial Medical and Surgical Journal*, a case of malignant disease of the right eye ball, occurring in the person of a female, aged seventy-six. The disease commenced by repeated attacks of inflammation of the organ, followed by loss of vision, enlargement of the eye-ball, and severe lancinating pain On admission into the Cumberland Infirmary the eye was somewhat increased in size, and the lower lid rendered prominent by a tumour which protruded between the lids, and prevented their closure. This tumour was firm and lobulated, about the size of three small peas, closely adherent to the sclerotic coat on the inner and lower part of the surface of the globe, and slightly overlapping the cornea; it was firm and unyielding in structure, painful on pressure, and apparently of a pale yellow colour upon its surface, which could, however, with difficulty be seen, owing to numerous small red vessels with which it was covered. The natural whiteness of the sclerotic was lost, and had become changed into a pale dusky leaden hue, with numerous large varicose vessels ramifying on its surface. On examination of the interior of the globe through the cornea, a minute portion of a discoloured greenish iris was visible on the upper and outer part, protruded forwards against the cornea, the remaining portion of the anterior chamber being occupied by a tumour, which appeared to have proceeded from the posterior part of the eye; this tumour, at its upper part, was of a dirty red colour, while the lower part, which covered nearly half the internal surface of the cornea, presented a black melanotic appearance. The globe was exquisitely sensitive; there was constant profuse lachrymation, and she said she was never free from a severe burning sensation. The history of the case, together with the symptoms, and appearance of the globe, led to the tolerably certain conclusion that the disease was of a malignant nature, amenable to but one mode of treatment, and that dangerous and uncertain—the extirpation of the globe. On the one hand there was her age, which rendered any operation hazardous, the possibility that some other part was similarly affected, and the probability, almost amounting to a certainty, that a like disease would sooner or later manifest itself either in the neighbouring structures or elsewhere. On the other hand there was the constant suffering which she endured, the apparent limitation of the disease to the eye itself, and the probability that if the operation were successful she would enjoy an interval of ease, even should the disease again appear, which it might fairly be hoped would not be the case, as at her advanced age it could not be expected that her life would be prolonged for any very lengthened period. Taking all these circumstances into account, it was resolved to propose to her the removal of the affected organ, she being at the same time fully apprized both of the immediate danger incurred, and the uncertainty of its being attended with a beneficial result. She at once unhesitatingly resolved to submit to the operation, which was accordingly performed five days after her admission. The patient being placed on a couch, the head supported by an assistant, an incision, about half an inch in length, was made from the outer canthus, in order to render the exposure of the globe more easy; the lids were then separated, and a sharp-pointed bistoury was passed deeply into the orbit, and carried completely round; the globe was next drawn gently forwards with a vulsellum, and the optic nerve and other structures which remained, divided by a pair of curved scissors, and the eye removed. Having waited for some little time, until the hemorrhage had ceased, the wound of the outer canthus was brought together by a suture, and the lids were carefully closed, a piece of lint being placed upon them, and retained in its position by a bandage. The patient, who bore the operation very well, had not a bad symptom afterwards, and was discharged in greatly improved health and spirits, rather more than a fortnight afterwards. It appears, however, that in the course of three or four months she was affected with dyspeptic symptoms, arising from derangement of the functions of the liver; that organ gradually increased in size, attended with much suffering, and she died eight months after the extirpation of the eye The body was not examined, but there can be no doubt but that the disease of the liver was of a malignant nature. An incision having been made into the tumour on the external surface of the eye, it was found to be of a hard cartilaginous structure, of a palish yellow colour, intersected with numerous dense white bands characteristic of scirrhus; its base was firmly adherent to the sclerotic coat, which was somewhat thickened. On a section of the eyeball being made, another tumour was found arising from the internal surface of the sclerotic at its posterior and inner portion, occupying the greater part of the posterior chamber; it had nearly destroyed all trace of the vitreous humour and lens, d in its progress forwards, all the other internal structures of the eye. The surface of this internal tumour presented shades of colour varying from a dusky red to black, in its interior the same colours were perceived, but instead of the black portions being blended with and lost in the surrounding redness, as on its surface, they were separated from t by well defined margins. It was composed in part of a reddish grey structure of a brain-like nsistence, and in part of a pultaceous matter of a much less firm character, of a dark brown colour, almost approaching to black, with which the fingers became stained during the examination.

[The following are the only articles of interest to he profession in the last number but one of the *Lancet*.]

Encephaloid Disease of the Pelvic Viscera.—Mr. Hardy narrates a case of encephaloid disease of the pelvic viscera occurring in a boy about five 'ears of age. The first symptoms resembled those of calculus in the bladder, and, on sounding, a calculus was apparently discovered in the urethra, which appeared afterwards to have descended into he membranous portion of that canal, after which, lthough no stone was voided, the symptoms of alculus entirely ceased. This was followed by pain nd hardness of the perineum, which gradually increased, and the swelling which formed became arger, and was attended by obstinate constipation. 'he case was then regarded as one of encephaloid isease. The tumour continued to increase in size, nd, after a time, very rapidly, a side view of the elvis showing that great deformity was resulting, s posterior aspect being projected very considerbly backwards, especially at the lower part, which ad also become elongated. In these two directions, he swelling continued steadily to advance till death, he enlargement and deformity of the last stages of he disease being truly hideous. Occasional febrile ttacks, accompanied by pain, referred always to he stomach and bowels, next ensued, and for many nonths before death, a red excrescence pushed itself it of the extremity of the rectum, and sometimes led a little. Emaciation also made great progress, nd the skin round the anus and perineum became iberculated, but did not ulcerate; the neighbouring integuments were traversed by numerous venous trunks. The child ultimately sunk. The examination of the body after death showed that emaciation was extreme; abdomen tumid; an immense tuberculated tumour, commencing at the scrotum anteriorly, passed backward to the anus, which it surrounded, and filled up the whole space situated between the tuberosities of the ischia, extending posteriorly, and also upwards to the base of the sacral bone. Its surface was very irregular, with a fungous excrescence shooting out of the right side of the anus. The skin covering the tumour was traversed by numerous vessels, especially over the lower extremity of the sacrum, and surrounding the anus The right groin was occupied by a hard tumour of uneven surface, of the size of a lemon; and a similar one, but much smaller, was found in the opposite groin. The whole hypogastric region was occupied by a solid tumour, the apex of which reached to the umbilicus. On dividing the large perineal tumour from the scrotum backwards to the rectum, its outer layer was found of the density and appearance of ordinary carcinomatous tumour, and creaked beneath the scalpel. As the incision was deepened, the scirrhous matter became mixed with softer material of the same general character, interspersed with numerous bloody points: and deeper still, it had the appearance and consistence of brain intermixed with coagula—the true fungoid tumour The whole of the rectum was affected by the disease, and was so compressed and straitened that the little finger could with difficulty be passed through its lower two-thirds. The mucous membrane was found intact. The excrescence before referred to, as pushing out of the bowel, was nothing more than an internal hemorrhoidal tumour. On opening the abdomen, the large tumour before spoken of was found to consist of the urinary bladder, the upper third of which appeared healthy, and the lower two-thirds invaded by the disease On opening this viscus, the diseased portion of the anterior wall was found full two inches in thickness; its posterior wall from five to six inches thick, in both cases white and of scirrhous hardness. The upper third of the bladder, though much thickened, was healthy in structure; it contained a few ounces of clear, straw-coloured urine, of the usual odour The cavity of the diseased portion was completely obliterated, or diminished, so as to form a small canal of the calibre of the urethra, with which it was continuous. The urethra itself was pushed considerably towards the left side of the pubic symphisis, but its mucous lining remained entire, as was also the case with the bladder. The disease completely enveloped the ossa pubis and lateral parts of the pelvic inlet, and extended upwards to the alæ of the ilia.

Femoral Aneurism Cured by Compression.—Mr. Mackern describes a case of aneurism of the femoral artery, which he treated successfully, by compression, using Signorini's tourniquet. The instrument at first was applied for half an hour at a time three times a-day, until, in the course of three weeks, it could be borne for six or eight hours, the seat of pressure being occasionally shifted along the course of the vessels. The treatment was continued for about five weeks altogether, and at the end of that time pulsation had entirely ceased, and there was a most sensible difference in the size of the tumour. The after treatment consisted in the application of an elastic bandage over the seat of the aneurism; a week after the cessation of the pulsation, the man returned to his employment, using the limb with caution, and has since remained free from any inconvenience, the tumour having nearly disappeared.

Imperforate Anus.—Dr. Smyth records a case of imperforate anus on which he had operated successfully. There was not any indication either by colour, or the touch of the situation of the rectum, or of any external perforation for an anus. He made an incision in the middle of the perineum, and the sphincter was observed to be straight, its mer sides being in close contact. This was cut through, and part of the levator ani and the fatty matter beneath were divided to the depth of an inch, no indications of the rectum being then discovered, the external wound was enlarged in both directions, the incisions being made cautiously upwards and ckwards; and still, when a depth of three inches had been obtained—Dr. Smyth being able to touch

the pubes in front and the sacrum behind, the wound being large enough to bury the index-finger — no appearance of the rectum could be made out However, when the child cried, a slight impetus was felt—a descending from behind—towards which, through the intervening substance, a trocar, as slender as an exploring-needle, was pushed, and on the second application the escape of gas through the canula showed that the bowel had been reached. An attempt was made to enlarge the opening with a director and bistoury, but failed; a full-sized trocar was, however, easily passed, and meconium discharged. On a subsequent occasion, Dr. Smyth passed a small pair of case-forceps along the canula, and taking hold of the bowel as near the opening as possible, he gently and gradually pulled it down upon the canula. This having been repeated two or three times, the opening in the bowel was brought down near to the external wound. The canula remained in for ten days. The sphincter now acts well, and a good anus is formed, if anything a little too far back; the bowels act naturally, a bougie being occasionally passed. A month has elapsed and no bad symptom has occurred. Dr. Smyth thus describes his motive for the final operative proceeding.—In making a canal through such a spongy substance as the cellular tissue, occupying the place where the bowel should be, such tissue will be found a most inadequate substitute for the muscular rectum; and in many cases the bowel may be found floating loose, or easily separated from its attachments, or these stretched, so that it may be brought down into its proper position; the passage then can easily be kept open, the tendency to healing, and so rendering another operation necessary, having in all cases been an immense obstacle to a perfect cure.

⁂ The case is far from being well told, and in some parts the statements are absurd, as, for instance—the greater part of the wound healed *by the first intention* around the canula *by granulations*. A perusal of any of the manuals on surgery will teach Dr. Smyth the difference between the healing of a wound by the first intention, and by granulations.

Tetanus.—Mr. Newton describes a case of tetanus occurring in an old sailor from a contused and suppurating wound of the great toe, in treating which he prescribed the tincture of aconite, with the tincture of tobacco, and solution of morphia, but without advantage. The man died the morning after the medicine was prescribed. None of the physiological effects of the aconite were produced.

Scotland.

Popliteal Aneurism.—Mr. Syme narrates, in the *Monthly Journal of Medical Science*, the case of a baker, thirty-two years of age, on whom he operated for an aneurism of the left popliteal artery, there being at the same time a commencing aneurism in the right ham. Considerable difficulty was experienced in passing a needle round the vessel, in consequence of its unusually firm adhesion to the sheath; and when the thread was tied, he felt the inner coats yield to a greater extent than upon any former occasion. Notwithstanding the evidence thus afforded of preternatural thickening, and morbid alteration in other respects, every thing went on well. The patient experienced no local uneasiness; the wound healed by the first intention so completely, that the lint applied to it never required to be changed; the tumour soon disappeared; the ligature separated on the twenty-first day, and the patient was dismissed cured of that aneurism; but was re-admitted five weeks afterwards to be operated on for the disease in the right ham. Mr. Syme then encountered still more difficulty in detaching the artery from its connections than on the previous occasion. At length the ligature was passed quite satisfactorily, and, not expecting any further trouble, he proceeded to tie it, but in so doing, he experienced a sensation as if the vessel had given away entirely, while a stream of arterial blood suddenly filled the wound, and confirmed the suspicion that it had done so. Pressure being made in the groin, he detached the artery higher up, and passed the aneurism-needle with the view of applying another ligature with less force. As the instrument, when withdrawn, was followed by an appearance of dark-coloured blood, causing a fear that the femoral vein might have been wounded, he determined not to tie the thread, and removed it, intending to rely upon pressure to control any hemorrhage that might ensue. None, however, recurred, and at the date of the report the patient was about to be discharged. Mr. Syme remarks that in the event of encountering a difficulty similar to that which was presented by this case, he should be prepared to meet it by the means of a small blunt hook, so fashioned as to embrace the artery, and hold it aside, while the edges of the aperture in the sheath being separated by catch-forceps inserted into them, the point of a narrow knife might sufficiently detach the firm connections of the vessel.

Urinary Calculus in the Female.—In the same journal, Mr. Syme records the case of an aged female, in whom there existed a calculus sacculated between the urethra and vagina. He dilated the orifice of the urethra by incision of the mucous membrane, and then divided the parietes of the canal, first forwards and then backwards, so as to lay it open through the whole extent from its orifice to the bladder, without at all injuring the vagina, and then extracted an oval calculus, measuring an inch and a quarter in length. The patient required to have her water drawn off for two days, after which she did not suffer any further inconvenience, and finally returned home.

Sinuses depending on Exfoliation of the Pelvis.—In the same journal, Mr. Syme draws attention to the fact, that sinuses in and about the pelvis, may be caused by exfoliation of portions of the ischium and pubes, induced either by muscular exertion, or external violence, and that the dead portion, being imprisoned by the dense structures surrounding it, may maintain a discharge of matter for an indefinite length of time. He then describes two cases of this disease, one resulting from muscular exertion, and the other from external violence. In the first case the sinuses were situated at the lower part of the belly, and upper part of the thigh, and the discharge was very profuse. It had continued for about fourteen months, and the patient was in a state of great exhaustion and emaciation. Finding that there was no difference, either real or apparent, in the length of the limbs, and that there was no sign of disease in the hip-joint or spine, Mr. Syme suspected that an exfoliation at the origin of the adductors or flexors of the thigh was the source of the discharge; and upon inserting a probe into the opening left by the abscess, distinctly felt a portion of dead bone. He dilated the sinus by incision upwards sufficiently to admit his finger, and then finding that the exfoliation lay in a cavity formed by very dense texture, partly by cutting with a blunt-pointed curved bistoury, partly by stretching with the finger, obtained sufficient space to extract two pieces of dead bone, one an inch, the other an inch and half in length, with about half these extents in breadth. They consisted of spongy or cancellated osseous texture; and one of them appeared to have formed part of the tuberosity of the ischium. He then carefully examined the cavity, and could not discover any more dead, or even denuded bone. The patient suffered little during the operation, and nothing after it. He noticed almost directly a diminution of the discharge, which in the course of a few days became so scanty as to occasion no inconvenience. His strength daily increased, and he was, at the date of the report, not quite four weeks from the operation, about to be discharged. The second case was more complicated. The patient, a lad eighteen years of age, was admitted with a very tight stricture at the bulb, caused about eight months previously by the fall of a very heavy piece of iron machinery on the pelvis. Extravasation of urine and extensive sloughing of the perineum followed, with the separation of a piece of bone at the end of a month. The sore then gradually healed, but with increasing difficulty of micturition, which at length nearly ceased through the proper outlet, and was effected chiefly by an orifice in the perineum. This opening was situated on the right side, near the hip, in the centre of a large and very firm cicatrix, resulting from the loss of substance that had taken place in the first instance. After Mr. Syme had succeeded in dilating the urethra to a certain extent, he carried a moderate sized bougie on to the bladder, and in so doing, he encountered a hard substance, not giving the clear ring of stony matter, and which, therefore, he concluded to be a piece of bone. Having passed a small grooved staff into the bladder, Mr. Syme made a free incision on the left side of the perineum, the sinus that opened on the right side being so long and tortuous, that a probe could not be conveyed through it to the object for removal. Having inserted his finger through the dense and thickened textures, he felt a piece of bone lying in a cavity of cartilaginous firmness, and after dilating the aperture sufficiently, he extracted two exfoliations, which together measured two inches in length, and one in breadth. They seemed to have formed part of the symphysis pubis. After the operation, the patient confessed that he had suffered the greatest distress in attempting to make water, but had concealed it, for fear of what might be considered necessary to afford him relief. He felt perfectly easy after the exfoliations were removed, and was dismissed about a month after the operation.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

By G. J. GUTHRIE, F.R.S., &c.

Lecture III (continued).

Baron Dupuytren on aneurisms complicating fractures, and wounds by fire-arms, and their treatment by Anel's operation; M. Delpech's case; Baron Dupuytren's case of false aneurism from pistol-shot wound of the leg, with successful ligature of the femoral artery; Remarks on his practice; Case of diffused aneurism of the thigh, following fracture of the femur, terminating by fatal mortification; Case of true popliteal aneurism, becoming diffused by rupture of the sac; incision into the false aneurism, amputation, and death; Sir Astley Cooper's case of ligature of the femoral, from wound in the leg, secondary hemorrhage, and amputation; Mr. S. Cooper's successful case of ligature of the femoral, for wound of the leg; Mr. S. Cooper's successful case of ligatur of the popliteal artery, for a wound in the calf of the leg; Mr. Guthrie's successful case of ligature of the perineal artery at the seat of injury, Mr. Hall's successful case of ligature of the posterior tibial artery at the seat of injury; Mr. Arnott's successful case of ligature of the posterior tibial artery at the seat of injury, Mr. Roche's case of ligature of the posterior tibial artery for aneurism after amputation; Mr. Collier's case of ligature of the posterior tibial for secondary hemorrhage after hospital gangrene; Mr. Stanley's cases; The operations for placing a ligature on the posterior tibial artery; All such wounds, and all recent aneurismal swellings resulting from them, are to be treated by incision, and the application of two ligatures to the artery.

The Baron Dupuytren in 1828 published a paper entitled "Memoire sur les Aneurismes qui compliquent les fractures et les plaies d'armes à feu et sur leur traitement par la ligature pratiquée suivant la methode d'Anel," in the *Repertoire General d'Anatomie et de Physiologie*, which operation he recommends as superseding that of amputation, which, up to that time, he says, had been usually performed in France in such cases, and with the view of avoiding the operation I had recommended some years before on the part injured, by cutting through a mass of muscular fibres. The operation the baron did was that of Hunter, and not, as he states, that recommended by Anel, who never performed one on that principle. A strange error for the baron to have fallen into, but no less so than the statement made at page 22 that he had consulted in vain both ancient and modern authors on this subject, although Breschet had translated Mr. Hodgson's work on the Diseases of Arteries nine years before, in which my earliest cases were especially noticed. His memoir shows, at all events, that the practice the Baron Dupuytren recommended to the surgeons of France in 1828 as worthy of their adoption, had been tried

by many of the surgeons of the British army in 181 and 1812, and found wanting, and is an honourabl testimony to their labours. The baron supports his views by the relation of seven cases, which I have transcribed in my work on this subject, althougl two only bear effectually upon it. One is by Delpech the other by himself. In Delpech's case (No. 11 the patient, Jacques Boudet, thirty years of age had his left leg broken (a comminuted fracture) or the 8th of May, 1815, by the wheel of a car laden with hay. On his arrival at the Hospital St. Eloi, M. Delpech found the limb enormously swollen, and this swelling was accompanied by pulsations, which were very distinct near the calf, and more or less perceptible when pressure was made on or removed from the above artery. The femoral artery was tied next day, and the patient recovered, and was discharged cured on the eighty-second day.

In this case it was not known whether the anterior or the posterior tibial artery was wounded, or the femoral, or all three, or the popliteal alone. An incision made, even in the right place, must have made a comminuted fracture a compound one, and greatly endangered the life of the patient. The operation was therefore a fair experiment, and if it failed, amputation was still a resource before mortification had taken place. It is not exactly a case in point.

The baron's seventh case, that of Captain de Gambaud, fairly however meets every point, and as far as it goes fully establishes his opinion.

Case 42.—"M. de Gambaud received, February 10th, 1818, a wound from a horse pistol, which entered the upper part of the right leg, from the front backwards, and from the outside inwards, passing between the tibia and the fibula, which latter it slightly injured. A violent bleeding immediately ensued A young surgeon stopped the hemorrhage by the application of a compress and bandage. The leg became swollen and very painful, to which succeeded an alarming numbness; nevertheless life remained in the limb, and no outward bleeding occurred till the thirteenth day; but during this time an internal effusion had taken place, and an aneurism was developed, which increased every day, and became more observable from its synchronous movements of expansion and contraction with those of the pulse.

"The bleeding was renewed several times in a few days, and greatly weakened the patient, in spite of the assistance, both internal and external, which was afforded him. The foot and leg were of a violet colour, swollen, cold, and numb On the upper part of the leg there was a swelling accompanied by tension, and a movement of expansion and contraction, synchronous with the action of the heart. There were two small round openings with unequal edges on this tumour, situated the one at the back of the leg near the fibula, the other on the inner edge of the calf The first was where the ball entered, and the second where it came out They both for a few hours had been closed by clots of blood, that each pulsation threatened to raise and force out. A tourniquet applied to the lower part of the thigh on the course of the femoral artery, would of course lessen the impulse of the blood, but could not prevent its getting to the tumour, and giving rise to frightful shocks.

"Such was M. de Gambaud's state; the wound that he had received, the first hemorrhage that he had sustained, the tumour which had been formed from the first moment that the blood had ceased to flow outwardly, the volume and tension of this tumour, the nature, extent, and strength of its movements, the repeated bleedings that the patient had suffered, all proved that the ball had destroyed one or several of the great arterial trunks in the ham.

"What was to be done? We could not again make use of compression, which had already been fairly tried, and had not prevented five or six hemorrhages taking place, which had reduced the patient to an alarming state of weakness. Ought we to place a ligature on the extremities of the divided vessels?

"But what were those vessels? Was it the anterior or posterior tibial artery, or the peroneal, or the popliteal artery, or was it several of these at the same time? If it were one or more, how should we attack them, before or behind, or on these two points successively?

"But to all who know the depth at which these vessels are situated, their relation to the bones, muscles, and nerves, this project appears impracticable. Could we even determine exactly, which was impossible, which vessel was injured, how could we get at it? How could we distinguish it from the soft, torn, and bruised parts which would surround it? or how would the instruments and the threads necessary to tie a ligature be got to the bottom of wound thus deep, and between the bones? The amputation of the thigh seemed the most promp and safe remedy; and this was what my youn colleagues wished, and only waited for my sanctio to perform. Amputation is not, however, withou danger, and in my opinion will kill three out o twelve, when practised even upon young and health persons, such as are chosen for its victims on th field of battle. I did not therefore recommend tha it should be had recourse to, but advised the placing of a ligature on the femoral artery. If the even did not turn out as I expected, if the blood brough back by the collateral arteries continued to flow either at the superior or inferior extremity of the divided artery, or if from any other cause the ligature should prove insufficient, it would become the first part of an amputation, neither more dangerous nor more painful from being performed a two intervals. The operation was performed in one minute. It proved successful, and M. de Gambaud was quite cured in three months."

To support his opinion that this case should lead he way towards erecting the practice pursued into a precept in surgery, he is forced to consider certai points as facts, which have never been demonstrated o be facts; but I shall give his own words:—

"The ligature, in suspending the course of the blood in a divided vessel, the solution of continuity of which has caused an external and internal bleeding, gave time and means to the inflammation to cicatrise the wounds in the vessel, and to render he cut extremities impermeable to the blood which he anastomosing branches might bring to them.

"To judge by analogy, this obliteration ought to be more easy and more certain after a gunshot wound than any other.

"One of their most remarkable effects is to contract (*froncer*) the orifices of the vessels, to concrete or coagulate the blood contained in their extremities, and to render them impervious."

Remarks.—This last passage cannot be admitted as a correct statement of the effects of a gunshot wound on arteries

I have shown in the preceding observations the real effect of a ball on the extremity of a divided artery, and that the appearances depend very much on the size and structure of the vessel. In what manner the ball can contract (*froncer*) the orifice of an artery has never been shown, neither can it be easily understood, inasmuch as the act of contracting must be a vital act dependant on the powers of the artery itself. If it be a mechanical act, arising from injury, it must be a contusion; and this cannot be advanced as a process likely to consolidate the end of the vessel, it being now well known that the first and most simple state of adhesive inflammation is the best calculated for permanent closure of a divided artery.

When a wounded artery has been tied at a distance from the wound, as in the case of M. Dupuytren, it is certainly true that if the blood can be prevented by this means from passing into the divided vessel, there will be a greater chance of the natural processes of inflammation and granulation which are taking place in and around it, closing it up, than if the blood be allowed to flow through it. But it is only then a chance. It is impossible to calculate the time which nature may require to bring the blood by the collateral vessels into either the upper or the lower end of the vessel; it may occur immediately; it may not do so for hours or for days, and on the speculation that it may not do so, the first hope of safety depends—the second on the further accidental circumstance that the end of the artery may be closed in the interval. Surely this cannot be considered a scientific operation, and fit to be erected into a precept in surgery, which depends on two accidental circumstances, neither of which can in the slightest degree be calculated upon.

There are many other reasons why the operation was a bad one in this case, and always will be a bad one in all similar cases. The patient was made to undergo the chance of mortification of the extremity, which it is probable would have taken place, if the operation had not been delayed until thirteen days after the first hemorrhage occurred from the wound, during which time the inflammation in the limb had given the collateral vessels a disposition to enlarge. The wound itself was not treated as the principles of surgery require. A quantity of decomposed blood was pent up under and between the muscles of the calf of the leg, together with some of the patient's clothes, and some spiculæ of bone. In a case like this, unattended by the fear of hemorrhage, the baron should have enlarged the wound, cleared away the clots of blood, and have placed it in a simple state. There cannot be a doubt on the subject, and the operation of making an incision through the muscles of the calf of the leg would have enabled him to do all this, and to have secured the vessels, if there had been even four bleeding extremities, without any difficulty or danger.

The Baron Dupuytren applied Mr. Hunter's theory of the operation for aneurism to the treatment of a wounded artery, and succeeded by chance. Others have done the same long before him; but nothing which is dependent on chance or accident can ever become a principle in surgery, and I understand the baron became so thoroughly convinced of this before his death, that he at last advocated the principle that a wounded artery should be tied at the injured part, and not at a distance.

Case 13.—A gentleman was thrown from the top of a coach at Chatham, and suffered a severe injury of the thigh, which broke the bone. No further injury was suspected, although the lower and internal part of the thigh swelled very much, until the toes began to turn black and to mortify. My opinion was now desired, and my reply was, amputate the limb, or you will lose your patient by the extension of the mortification, which eventually occurred.

Remarks.—If the mortification had not taken place, the surgeon could with propriety have awaited the progress of the diffused aneurism, there being no external wound. If it continued, nd remained stationary, or only slowly increased during weeks, the operation for its cure by ligature of the artery above would have been a fair experiment. If, on the contrary, the aneurismal swelling increased rapidly, or the consolidation of the fracture did not take place, amputation was the only resource.

Case 14.—A man was admitted into the Westminster Hospital, under the care of Sir Anthony Carlisle, having had a beating tumour in his ham, which had suddenly disappeared on something apparently giving way in his leg, which caused it to swell to nearly double the size of the other, from immediately below the knee to the ankle. There was no doubt in my mind of its being a diffused aneurismal swelling from rupture of an aneurismal sac, and I suggested the propriety of placing a ligature on the femoral artery, as for an ordinary aneurism, and awaiting events; such as laying open the soft parts of the leg for the evacuation of the coagulated blood, or of the matter which might form, or to make the ligature of the artery the point of amputation, if gangrene should supervene. Sir Anthony Carlisle preferred laying open the leg at once; this he did by an incision through the calf of the leg, opening into a largely dilated and ruptured sac, formed at the origin of the posterior tibial artery. The coagula being removed, the popliteal artery bled vigorously; the anterior tibial opening into the sac did the same, and the lower end of the posterior tibial poured out arterial blood even more vigorously than the anterior tibial. Sir Anthony Carlisle decided on amputating the limb, which he did, and the patient died.

Remarks.—If this diffused aneurismal swelling had followed a wound inflicted some two or three weeks before, the three bleeding arteries and the effused blood would not have rendered amputation admissible unless mortification supervened. It the previously diseased state of the artery which had led to the formation of the aneurism that induced me to recommend that it should be tied in the thigh as an experiment, and after the diseased

artery with its sac, &c., had been laid open, that the limb should be amputated.

CASE 45.—Sir Astley Cooper at one time shared in the same opinion as Dupuytren, and tied the femoral artery for a wound in the leg below the knee. Mr. Green, who was present, informs me that the bleeding returned, the limb was amputated, and Sir Astley abandoned both the theory and the practice.

CASE 46.—Mr. S. Cooper did the same thing at Brussels after the battle of Waterloo, and succeeded; but he admits in his dictionary, article "Arteries," that he succeeded only because the collateral branches did not re-establish the circulation in the lower end of the artery, or that it had been closed in time to prevent it when they had done so. This was an operation successful by chance, and not on principle. Mr. S. Cooper did better in 1834, in the following —.

CASE 47.—The man had a wound in the calf of the leg, and the house-surgeon of University College Hospital having failed after several trials to secure effectually the wounded artery, he (Mr. Cooper) tied the popliteal, and succeeded. In this case he descended from Hunter to Anel, but this also only succeeded by accident, and another operation would have been required if the collateral circulation had been early restored, whereas a single straight incision through the muscles of the calf would have enabled him to tie all the cut vessels, even including the popliteal, or principal trunk. I am quite satisfied that if another case of the kind should occur to the learned professor of surgery, he would tie the artery above and below the part injured, and by the operation I shall show you has succeeded so well.

CASE 48, by Mr. Stanley.—A butcher in slaying an ox received a wound on the inner side of, and about two-thirds down the leg; the length of the wound was not more than half an inch, but it penetrated from the inner almost to the outer side of the leg, and deeply in the direction of the posterior tibial and peroneal arteries. Profuse arterial bleeding immediately ensued. A bandage was placed around the leg, which was not disturbed for eight days; then, on removing it, the hemorrhage returned. He freely enlarged the wound, and exposed the posterior tibial artery, which was of unusually small size, and was partially divided. He placed two ligatures around the artery, one above and the other below the wound in it.

Much constitutional derangement followed, with inflammation of the absorbents up the thigh. This was succeeded by an attack of delirium tremens, from which the man sunk on the fifteenth day from the receipt of the wound; but there was no return of bleeding after the ligature of the posterior tibial artery.

On examining the limb, the posterior tibial artery throughout was found to be not more than half its usual size. The peroneal artery in its whole length was more than twice the size of the posterior tibial. It was found that the knife in its passage through the leg, having partially divided the small posterior tibial artery, had also penetrated the large perineal artery at a point where it was very deeply situated, in a hollow between the fibula and the inter-osseous ligament, but which had not bled.

CASE 49, by Mr Stanley.—A boy, ten years of age, in walking, slipped his foot through a pane of glass, which wounded the inner side of the leg in the hollow between the inner malleolus and os calcis. Profuse bleeding immediately ensued, which was stopped by a bandage. Three days afterwards the removal of the bandage was followed by a flow of arterial blood. He enlarged the wound, exposed the posterior tibial artery, and observed a hole in the side of it, from which the blood issued. He placed two ligatures around the artery, about an inch distant from each other, the one clearly above, the other below the orifice in the vessel. About an hour afterwards the arterial bleeding returned, and on sponging out the wound, to his surprise, he found that the blood escaped from the hole in the side of the artery. He then placed two additional ligatures around the artery close to the hole in it. There was no return of the hemorrhage.

It was presumed that a branch had conveyed the blood into the artery in the interspace of the two ... which were first applied.

The following case was published by me in the 7th vol. of the "Transactions of the Medico-Chirurgical Society."—

CASE 50. Henry Vigarelic, a private in the German legion, was wounded on the 18th of June, at the battle of Waterloo, by a musket ball, which entered the right leg immediately behind and below the inner head of the tibia, inclining downwards, and under or before a part of the soleus and gastrocnemius muscles, and coming out through them, four inches and three quarters below the head of the fibula, nearly in the middle, but towards the side of the calf of the leg. In this course it is evident that the ball must have passed close to the posterior tibial and peroneal arteries; but as little inflammation followed, and no immediate hemorrhage, he was considered to be one of the slighter cases. On the latter days of June he occasionally lost a little blood from the wound, and on the 1st of July a considerable hemorrhage took place, which was suppressed by the tourniquet, and did not immediately recur on its removal. It bled however at intervals during the night; and on the morning of the 2nd it became necessary to re-apply the tourniquet, and to adopt some means for his permanent relief.

The man had lost a large quantity of blood from the whole of the bleedings, his pulse was 110, the skin hot, tongue furred, with great anxiety of countenance: the limb, from the application of the tourniquet from time to time, was swelled, a quantity of coagulated blood had forced itself under the soleus in the course of the muscles increasing the size of the leg, and florid blood issue from both openings on taking the compression o the femoral artery. On passing the finger into th outer opening, and pressing it against the fibula, sort of aneurismal tumour could be felt under it, and the hemorrhage ceased, indicating that the peroneal artery was in all probability the only vessel wounded.

In this case there was, in addition to the wound of the artery, a quantity of blood between the muscles, which in gun-shot wounds accompanied by inflammation is always a dangerous occurrence, as it terminates in profuse suppuration of the containing parts, and frequently in gangrene. Its evacuation therefore became an important consideration, even if the hemorrhage had ceased spontaneously.

The man being laid on his face, with the calf of the leg uppermost, I made an incision about seven inches in length in the axis of the limb, taking the shot hole nearly as a central point, and carried it by successive strokes through the gastrocnemius and soleus muscles towards the peroneal artery, which I attempted to discover, but this was more difficult than might be supposed, after such an opening had been made. The parts were not easily separated, from the inflammation that had taken place, and those in the immediate track of the ball were in the different stages from sphacelus to a state of health, as the ball in its course had produced its effect upon them, or their powers of life were equal or unequal to the injury sustained.

The sloughing matter mixed with coagulated blood readily yielded to the back of the knife, but was not easily dissected out. The spot which the arterial blood came from was distinguished through it, but the artery could not be perceived, the swelling and the depth of the wound rendering any operation on it difficult. To obviate this inconvenience, I made a transverse incision outwards, from the shot hole to the edge of the fibula, which enabled me to turn back two little flaps, and gave greater facility in the use of my instruments. I could now pass a tenaculum under the spot whence the blood came, which I raised a little with it, but could not distinctly see the wounded artery in the altered state of parts, so as to secure it separately. I therefore passed a small needle, bearing two threads, a sufficient distance above the tenaculum to induce me to believe it was in sound parts, but including very little in the ligature, when the hemorrhage ceased; another was passed in the same manner below, and the tenaculum withdrawn. The coagula under the muscles were removed, the cavity washed out by a stream of warm water injected through the external opening, the wound gently drawn together by two or three straps of adhesive plaster, and the limb enveloped in cloths constantly wetted with cold water. The patient was placed on milk diet.

On the 4th, two days after the operation, the wound was dressed and looked very well; the weather being very hot, two straps of plaster only were applied to prevent the parts separating. On the 5th, a poultice was laid over the dressings, in lieu of the cold water, the stiffness becoming disagreeable. On the 6th, as the wound, although open in all its extent, did not appear likely to separate more, the plasters were omitted, and a poultice alone applied. On the 8th and 9th it suppurated kindly; and on the 10th, or eight days from the operation, the ligatures came away, the limb being free from tension, and the patient in an amended state of health, his medical treatment having been steadily attended to.

From this period the cure went on, although slowly, without accident; a small abscess formed at the inner and lower edge of the soleus muscle, but closed shortly after its contents were evacuated. The wound was entirely healed in three months, but the leg was bent on the thigh, and required mechanical means for its extension.

The length of the fibula is sixteen inches. The cicatrix of the wound made by the ball is four inches and three quarters below the head of the fibula. The sound limb, four inches and three quarters from the head of the fibula, is thirteen inches and three quarters in circumference. The limb operated on eleven inches and three quarters, being a diminution of two inches. The length of the cicatrix is six inches and a half. The peroneal artery was tied therefore by computation one inch and a quarter below where it is usually given off by the posterior tibial.

The man was brought to England to the York Hospital at Chelsea, and walked about without appearing lame, although he could not do so for any great distance. He suffered no pain, except an occasional cramp in the ball of the foot, and some contraction of the toes, which took place generally when he rose in a morning, and continued for a minute or two, until he put them straight with his hand; this I did not attribute to the operation, but to some additional injury done to the nerves by the ball in its course through the leg.

Mr. Hall, of East Retford, has published the following case in the *London Medical Gazette*, of the 6th February, 1846:—

CASE 51.—April 16, 1841. A gentleman, upwards of sixty, had been thrown from his horse, and was reported to be bleeding to death from a wound of the leg. In less than half an hour after the infliction of the injury, his clothes were saturated with blood, and a considerable quantity had flowed into his shoe. He was cold and faint, with a feeble pulse. A little brandy and water were immediately given to him, and he was placed in bed. On removing his clothes, a wound of about an inch in length was seen in the calf, a little below the junction of the upper with the middle third, and from which the blood was now again beginning to flow freely. A tourniquet was applied over the femoral artery, which retarded the hemorrhage, but did not altogether check it. The nature of the injury was at once evident, and the necessary steps immediately taken for securing the posterior tibial artery. Introducing a long narrow bladed knife into the wound, the muscles were carefully divided above and below the seat of injury, down to the deep fascia, which was now clearly seen on sponging away the coagulated blood, and into which a small opening had been made. The manner in which the injury had been sustained was doubtful. When it occurred, the old gentleman was riding a horse that plunged violently, and threw him with great force to the ground; his foot was fixed in the stirrups, and he was dragged some distance; he says, when his foot got at liberty, the horse kicked him with considerable violence on the leg; he had neither trousers nor gaiters upon his leg, which was only protected by a thick stocking. On looking at the shoes of the horse, it was found he had been shod behind with what are called "caulkings," one of which it is supposed had been driven into his leg. The opening in the fascia was enlarged, and, after removing a good deal of coagulated blood, the artery was found, and secured by passing a ligature above and below the wound, the vessel was

divided between them. The wound in the muscles was then brought together, and a bandage applied from the toes to the upper part of the thigh; the patient appeared to experience much relief from this, which in a great measure checked the spasm and quivering of the muscles, which was somewhat severe during and immediately after the operation. A large dose of liq. opii. sed. was given. No constitutional disturbance worthy of notice took place. Both ligatures came away on the 12th day after the operation. Mr. Hall saw this gentleman some time afterwards; he was on horseback, and told him he could not discover that the leg on which the injury was sustained was worse than the other; and that it did its work very well.

CASE 52.—A robust young man was admitted into the Middlesex Hospital on January 1, 1815, with a punctured wound from a joiner's chisel in the calf, at the junction of the upper with the middle third of the leg, and a little to the inner side of the mesial line. Arterial and venous blood flowed in quantity. From the situation, depth, and direction of the wound, as ascertained by a probe, it was evident that the posterior tibial was probably wounded. Mr. Arnott determined to cut down upon it at once, in order to secure both ends. For this purpose, taking the punctured wound as a centre, he made an incision through the skin and muscles of the calf, to the extent of six and a half inches; the deep fascia being thereby exposed, the opening in it made by the chisel was enlarged to the extent of two inches. After considerable difficulty from the bleeding, it was ascertained, that besides the wound in the posterior tibial, both venæ comites were divided. On account of the troublesome character of the bleeding from these veins, and the difficulty created in discovering the artery, one of the veins had a ligature placed on both ends, whilst the lower end of the other was subjected to pressure. Two ligatures were then placed on the artery, one above the other below the puncture, it was not till the latter was tied that the hemorrhage ceased. Little febrile disturbance followed the operation; the lower ligature on the artery came away on the eighth day, the upper on the ninth. During the night of the eleventh, some bleeding took place from the lower angle of the wound, which was not arrested by compression of the femoral artery, but which was easily checked by displacing some coagula from the wound, and making pressure at the lower part of it by means of a small compress of lint, which was left in the wound. This was removed in three days, and the case proceeded subsequently uninterruptedly to a favourable termination. The wound cicatrised in less than two months, and the patient recovered with a perfectly efficient limb.

CASE 53.—John Sullivan, 27th regiment, had his leg amputated six inches below the knee, at Tarragona, in April, 1833, by Staff-surgeon Roche, in consequence of a compound fracture and dislocation of the ankle-joint. Three days afterwards hemorrhage took place, and a small aneurismal tumour about the size of a pigeon's egg was discovered bleeding about an inch above where the ligature had been applied. This part of the calf was laid open, and a ligature applied midway between the sac and the origin of the artery from the popliteal. It succeeded, and was the operation of Anel, justly preferred to that of Hunter, because there was an open stump with which the little aneurism was continuous.

CASE 54.—Jean Debret, a French prisoner of war, came under the care of Staff-surgeon Collier, in the beginning of September, having been wounded at the battle of Waterloo by a musket ball, which broke both bones of the left leg, and requiring several incisions to be made into the soft parts, which were greatly implicated by disease. He had suffered an attack of erysipelas, and the constitution had sympathised greatly with the injury, and was little able to resist it. Towards the end of the month the wound assumed the character of the hospital sore or gangrene, which spread rapidly over all the parts down to the tibia. The extensor tendons were dissected bare for the space of four inches, and the interosseous membrane even appeared to have partaken of the disease. On the 4th of October hemorrhage took place about two inches and a half above the ankle-joint, which was arrested by pressure. On removing this and some coagula which covered the artery, it bled furiously; a little dissection laid the artery bare an inch and a half above this spot, where a ligature was passed around it, and the bleeding never returned. The ligature came away on the sixth day, and the man recovered and was sent to France with a serviceable leg although lame.

Several of our best anatomists, in order to avoid the operation I have recommended, which Messrs. Hall and Arnott have so well performed, and which renders the division of the great muscles in the calf of the leg necessary, advise a tedious and more difficult operation to secure either the posterior tibial or the peroneal artery; and as a mistake may be made as to which is divided, when the wounding instrument has passed from side to side, and blood flows freely from both orifices, they further advise that one should be tied first, and if not successful, that a second operation should be done to expose the other, instead of doing my operation at once, and thereby enabling the operator to place a ligature on either, or on both.

The operation of tying the posterior tibial artery in the middle of the leg, after the ordinary methods recommended, is not very easily accomplished. It is said the leg should be bent, the foot extended, and both placed on the outer side; an incision should then be made, about four inches in length, along the inner edge of the tibia, through the integuments and fascia (the internal saphena vein should be avoided), the edge of the gastrocnemius muscle will be exposed, this may be easily raised and drawn to the outer side; a director should then be insinuated beneath the head of the soleus, on which this muscle must be divided from its attachment to the tibia; the deep fascia of the leg will then be seen very tense and strong, binding down the deep-seated muscles and the tibial nerve and vessels; this must be cautiously divided on the director passed beneath it. The foot should now be extended as much as possible, and the knee placed in the flexed position, to relax the superficial muscles on the back part of the leg, when the artery may be felt pulsating about an inch from the edge of the tibia; the veins are then to be separated from the artery with a blunt instrument, and the aneurism needle passed round the latter in a direction from without inwards, so as to avoid the posterior tibial nerve.

On the dead subject this operation is not attended with much difficulty; in the living however the case is very different: the muscles are then rigid and unyielding, and when the fascia which covers them is divided, they leave their natural situation and become much elevated, so as to make the situation of the artery appear as a deep cavity, at the bottom of which the vessel is placed. Add to this that the artery is cut across, has retracted upwards and downwards, that both ends may not bleed and cannot be found in the small space which has been made, although both require to be tied; add to this that the surgeon may have made a mistake, and finds that it was the other and more distant artery that is wounded, or that both are injured, and the operator will be in a very unenviable condition.

Let us proceed however with the simple case. The operator has cut his four inches, has turned up the edge of the gastrocnemius, and has insinuated his director under the head of the soleus, which he has also sliced away from the bone. The artery is still an inch inwards, bound down by a strong fascia; pulsating it is said, bleeding I say if it pulsates, all this time as fast as it can, or else a tourniquet has been applied, and the pulsation has been suspended. The fascia must be cut immediately over or by the side of the artery; it will not do to separate it from the bone and then push it over; it cannot be done, and would not do if it could. The artery must then be allowed to bleed. The tourniquet must be unscrewed, and the wound is immediately filled with blood. Nothing can be done until this is sponged out, and to enable this to be done, the tourniquet must be screwed up, and then the surgeon is pretty much where he was before. We will suppose that he has succeeded in dividing the fascia, for an inch at least in extent, over the artery, without injuring it or anything else. What is directed to be done next? Why certain evolutions are to be performed with the leg, as described above, and then the surgeon is to separate the two veins from the artery with a blunt instrument, and then he is to pass an aneurismal needle under the artery from without inwards, so as to avoid the nerve. Now all this is to be done in a hole, the bottom of which the operator can scarcely see, and if he could it would not signify, because it is on the side of the bottom of the hole he is to perform these different evolutions on parts too likely to be covered continually with blood; for although the bleeding from the upper end of the artery may be suppressed by the tourniquet, that from the lower end in young persons may not; and at all events the unscrewing of the tourniquet will cause a most troublesome oozing, occupy a great deal of time, and give rise to much pain. Lastly, when the operator comes to the fascia, he will find his first four inches will not give him room enough; if he succeeds in dividing it, and tries to find the artery, the deficiency of space will cause him to enlarge his first incision; and before he has completed his operation, the quantity of cutting, retracting, pulling, sponging, and bleeding will make it to himself a most unsatisfactory operation. Of the patient's sufferings we will say nothing. If a bystander should inquire, why this most painful, difficult, bloody, tedious, and dangerous operation (dangerous from the chance of failure) is done?—the answer would be, solely because it is not usual to make a longitudinal incision in the muscles of the calf of the leg; an incision which if made by accident would be pronounced to be one attended with little danger, and not likely to lead to any subsequent detriment. Let us compare this operose proceeding with the following simple operation:—

An incision is to be made six or seven inches in length, by successive and rapid incisions, through the integuments and muscles of the calf of the leg down to the fascia. The centre of the incision is to be on a line with the holes made by the wounding instruments, or if they are diagonal to each other between them; and it may be either directly in the middle of the calf, or a little to the side of, or directly over the artery supposed to be wounded: it is not material which. The smoothness of the fascia points it out, and the loose cellular membrane connecting the divided muscles to it, allows of the edges of the long incision being easily separated, and to such a distance as to admit of the exposure of the posterior tibial artery, its two veins, and the nerve, in as distinct a manner as any other arteries, veins, and nerves, can be exposed in the human body. The tourniquet is now to be unscrewed, and the bleeding, if the wound did not bleed before, leads to the spot where the artery is injured. The artery may be laid bare in its whole extent by as common a piece of dissection as any ever practised, and nothing can interrupt the application of the ligature. The nerve, the veins, and the fascia cease to be surgical bugbears, and the operation is as simple as any in surgery. No surgeon or anatomist can dispute this statement. Mr. Stanley, Mr. Hamilton, M. Berard, and others, have successfully treated wounds in the lower part of the posterior tibial artery in this way, and a careful consideration of the cases related, and the facts and arguments advanced, must, I am satisfied, cause every surgeon to conclude that there is only one right way of treating wounded arteries in the leg.

My kind friend, Mr. Carmichael, of Dublin, at the conclusion of his case 39, reproaches me with having said, "In all cases of aneurism of the gluteal and sciatic arteries, the internal iliac should be tied, instead of an operation on the part itself." He admits he is aware that I do not mean this sentence to apply to aneurismal tumours, the consequence of wounds, but only to aneurisms formed by after injury of the artery. It was however, he says, quoted against him as an authority in his case which I have transcribed, and he is therefore desirous that all ambiguity on this point should be removed, that I should on all future occasions explicitly declare that all wounded arteries, and all aneurismal swellings of recent date occurring after wounds of arteries, are to be treated by ligatures of the artery at the wounded part. He desires that I should do this in such manner as to remove all doubt on the subject. I now comply with this desire in the plainest possible manner, and declare that any other mode of proceeding is contrary to those principles which ought to guide the surgeon not only in all such cases, but in all others in which it can by any possibility be applied.

A Course of Lectures on Hernia,

By JOHN FLINT SOUTH, Esq.,
Surgeon to St. Thomas' Hospital, and Professor of Surgery to the Royal College of Surgeons.

(Delivered in the Theatre of the College, and revised by the Professor for the MEDICAL TIMES.)

LECTURE III.

Experiments of M. Jules Cloquet, on "reduction en masse;" his explanation; Mr. Luke's statement; Dupuytren's opinion; Treatment; Can "reduction en masse" be remedied? Opinions of Dupuytren and Cloquet; Professor South's advice under such circumstances; Necessity of immediate recourse to the operation, when attempts at reduction have failed; Other proposed remedies; Purgatives, clysters; Opinions of Pott and Monro primus; Tobacco in clysters, urged by Sir Astley Cooper; Professor South's opinion; Tartar emetic condemned; Treatment when the patient refuses the operation; Practice of Monro Primus; Petit's case; Action of cold; Cline and Sharp's case; Treatment after the reduction.

This subject had not specially attracted the attention of English surgeons, except when during the operation for strangulated rupture, the unopened sac presumed to have been the bowel had been under that mistake, returned, with its contents still retained, into the belly, and thrust between the peritoneum and transverse or iliac fascia. This, though actually the same accident, differs from reduction in mass, inasmuch as the parts in front of the neck of the sac are divided by the knife, under the supposition of dividing the stricture, and the finger being introduced makes a cavity into which the rupture-sac, separated from its connexions by the operator's fingers, is either turned up on itself, or pushed. But beyond this reduction in mass had not been noticed, previously to Mr. Luke's excellent paper upon the subject was read in 1843 before the Royal Medical and Chirurgical Society, where, from the published report of the proceedings of the meeting, it appears to have been considered novel.

The possibility of effecting a reduction in mass by violent employment of the taxis had been doubted or denied, till experiments with this object had been made on the ruptures of dead persons by M. Jules Cloquet, who "accomplished reduction in mass in about twenty-five instances, partly of ruptures, either strangulated or otherwise irreducible, partly of empty hernial sacs. This was effected most easily in direct inguinal, next in femoral, and lastly in oblique inguinal ruptures. But he never succeeded with umbilical ruptures in adults."

M. Cloquet gives the following very clear and satisfactory account of the way in which this unhappy reduction is effected:—"When the neck of the sac does not adhere very strongly to the aponeurotic opening, and the latter is also somewhat dilated, which is not uncommon, in violently pushing the rupture towards the cavity of the belly, the adhesions of the neck and of the aponeurotic ring lengthen and break; the two openings, which were near, separate from each other, the former sinks, passing inwards, whilst the latter retains its place. Whilst the taxis is employed, the cone above the neck of the sac on its abdominal side becomes very prominent and much lengthened, is no longer formed as in the former case (where the neck of the sac adhered closely to the aponeurotic opening) by the whole thickness of the abdominal wall, but merely by the peritoneum, raised and detached from the muscles by the sac which endeavours to get between those parts. The sac re-enters successively and gradually through the abdominal ring as it dilates, and towards the end of the experiment it escapes suddenly and gets behind this opening. It is then easily felt through the abdominal walls by placing the finger on the spot which the rupture had occupied; it forms a large, hard, round chesnut-like tumour, deeply seated above the ring. Thus the reduction is complete, the rupture has returned *en bloc*, and is situated between the abdominal peritoneum and the posterior surface of the abdominal ring. The ring contracts slightly by its elasticity, as soon as the sac has entirely slipped above it, and to a certain point prevents the reappearance of the tumour externally. This reduction *en bloc* is sometimes followed by a slight rush, in consequence of the hasty passage of the bottom of the sac through the ring; but this rush never happens when the ring is loose and wide," in which case "the tumour goes in and out with equal readiness. The replacement in mass of a rupture, strictured by the neck of the sac, takes place most easily when the abdominal ring is of large size and short, when the sac and its neck are loosely connected to the surrounding parts, and when the protruded viscera adhere together, and to the sac, so that reduction in the usual way is impracticable. In one case of direct inguinal, and in another of crural rupture, I found that the tumour could only be returned in mass, although the neck of the sac was not narrow, in consequence of close adhesions between the protruded parts and their peritoneal covering."

These experiments of Cloquet upon the dead subject, pretty closely tally with Mr. Luke's general account of the accident in the living patient. And Mr. Luke further observes, "it is a circumstance worthy of remark that the firmness of the adhesions of the parts in which it is embedded, bears no proportion to the duration of the hernial protrusion, as might be, *à priori*, expected; for in all the cases of reduction in mass which he relates, the hernia had been of some years' duration, yet in each was reduced without the employment of much force."

This readiness to return, described by Mr. Luke, further confirms Cloquet's observations, and should warn the surgeon against too violent efforts in attempting reduction of a strangulated rupture. I doubt, however, that the connexion between the rupture-sac and its coverings is so slight as generally Mr. Luke's statement would seem to infer, for were it so, reduction in mass would be of daily occurrence under the unskilfully applied violent pressure so constantly employed, as is well known, in the ordinary use of the taxis.

In treating of the circumstances connected with the reduction in mass, Mr. Luke justly observes that "the too exclusive reliance upon the absence of tumour, as a sign of the non-existence of a hernia, may, in certain cases, be highly dangerous. In such cases more security will be derived from the institution of inquiries concerning the *previous existence* of a tumour in the part, and of its conditions when ascertained to have existed—such as its hardness, or the reverse; its freedom from pain, and also the amount of, and the manner of applying the force used for its reduction. By such inquiries, not only may the dependance of the symptoms of intestinal obstruction upon hernial strangulation be determined, but also the presumption of a reduction *en masse* may be raised or removed."

He also notices "that the presence of a sac, even without hernial contents, causes an abdominal fulness in the part, easily ascertained by examination. The absence of such fulness in a part where hernia is known to have previously descended, necessarily leads to the conclusion, that the sac, upon which it depended, has been displaced, and probably returned, together with the hernia. The sac in inguinal hernia below the external ring, becomes united with the spermatic cord, whereby the latter is usually rendered indistinct and obscure. The absence of that indistinctness and obscurity implies the removal of the cause which previously produced them, and, therefore, that the sac has been displaced. The continuance of the indistinctness and obscurity leads to a directly contrary conclusion. When a hernia descends from the abdomen, the aperture through which it descends is always enlarged and dilated. This fact is ascertainable by the introduction of a finger—a circumstance which becomes available to the diagnosis in these cases. Should a large aperture be detected, a previous hernial descent may be inferred. Under ordinary circumstances of hernia, when the contents are reduced into the abdomen, the area of the aperture is occupied by the remaining sac, whilst its margins are rendered more or less obscure. If, then, a large aperture be found free and unobstructed, with its margins unobscured, there is raised not only presumptive evidence of the previous protrusion of the hernia at the part, but also the further evidence of the displacement and probable return into the abdomen of the sac by which the hernia has been invested. We are led to a contrary conclusion by contrary circumstances."

Mr. Luke does not appear to lay so much stress upon the existence of a swelling within the walls of the belly, immediately above the internal ring, as from M. Cloquet's experiments and statements would be anticipated; for, though he observes "it may be expected that if such reduction has been effected, the inflammation of the hernial contents will cause a circumscribed pain in the part which it occupies, while a fulness, or even the rounded form of the hernia deeply situated within the abdominal parietes, may possibly be cognizable upon a minute examination, yet the absence, both of a circumscribed pain, and of fulness or rounded form, should not lead to a negative opinion; for in his first case neither pain nor fulness existed, yet, subsequently, a mass of strangulated intestine was discovered at the part. Their presence, however, may be taken as corroborative of an affirmative opinion, founded upon the manual examination previously instituted."

This statement of Mr. Luke's, in regard to the occasional absence of swelling, or, more properly speaking, its non-projection forward, is explained by a preparation already mentioned, in which an inguinal rupture had been reduced in mass; symptoms of strangulation continued, and the patient died on the fifteenth day. The rupture had existed many years, and the patient having worn a truss, suffered no inconvenience nor had difficulty in returning it, till one day, without assignable cause, it became tense and painful, and strangulated. The sac is pyriform, nearly three inches in its long diameter, situated between the abdominal and iliac muscles and the peritoneum. Part of it lies below the crural arch, and extends it nearly as far as the iliac vessels, and it forms a considerable tumour, projecting inwards towards the abdominal cavity, but is not discernible in front.

Dupuytren says, "that if the tumour be examined through the cavity of the peritoneum, it will be seen lodged in the iliac fossa—a little more outwards in crural—a little more inwards and deeper in inguinal rupture." And this difference of the kind of rupture may be the cause of the greater or less projection forward of the swelling, and its more or less ready discovery through the walls of the belly. In consequence also of its situation in the iliac fossa, he considers the sac has two layers of peritoneum in front of it—to wit, that portion lining the back of the abdominal muscles, and the other which spreads on the iliac muscles. Although this probably is so when a femoral rupture has been returned, yet it is not necessarily so as the peritoneum may be forced up above it, as it has been in the preparation of inguinal rupture just shown. But it is probable that the reduced sac may not rest at all in the iliac fossa, but may be thrust up before the peritoneum, between it and the abdominal muscles, as I have seen it, at least, when the sac has been returned during operations, in both situations; in one case, between the back of the peritoneum and the iliac fascia; and in another, between the front of the peritoneum and the transversal fascia; consequently, in the latter situation, it has not any additional peritoneal covering, but was immediately behind the abdominal muscles; and there does not appear any reason why it should not be so placed also when forced up without an operation.

Treatment.—When this untoward event is presumed to have taken place, the question naturally arises—can it be remedied? It has been advised that the patient should stand upright, and cough or strain, for the purpose of forcing the sac down again. But this seems little likely to be effected, on account of the immediate narrowing of the passage by which the rupture-sac has escaped from the belly. I have mentioned that Cloquet states that even in the dead subject, this opening contracts directly after the ascent of the rupture-sac, and to a certain extent prevents its reappearance externally. If this be so in the dead, it is still more probable that still greater contraction occurs in the living subject, and consequently the redescent of the rupture-sac is still less likely to be effected. Some other remedy must, therefore, be employed, "which," says Dupuytren, "consists in seeking for and drawing down the rupture by the opening through which it has passed into the belly, being assured that it will be found lying on the

internal surface of that opening, where it can be laid hold of with the forceps, and drawn out, with or without cutting the edge of the ring."

Now, whether the swelling can be distinctly made out, or whether there be only sufficient presumption of a reduction in mass having been effected, the operation should be conducted with great caution, as it has more or less of an exploratory character. It consists in cutting into the cavity from which the rupture-sac is presumed to have been thrust up. Most commonly, in inguinal rupture, the sac, whether full or empty, is situated in front of the spermatic vessels, which it conceals; if, therefore, when the cremaster muscle be cut through length ways, an empty space be found, behind which are the spermatic vessels, and into which the finger may be introduced and carried up into the belly through the rings and inguinal canal, and if this cavity be shreddy, and have not the shining and smooth appearance of the inner surface of the peritoneum then it may be presumed the sac has been thrust up and the cut must be carefully extended upwards till it can be reached, and then attempted to be brought down into the situation it had previously occupied When this is done it must be freely opened, the stricture fully divided, and the gut returned. If, on the contrary, when the cavity cut into is found smooth and polished, there is little doubt that it is the rupture-sac undisturbed, and the explanation of the symptoms of strangulation must be sought for in some other cause. But if, after cutting along the spermatic vessels, there be not any cavity, either shreddy or polished, if the finger cannot be passed into the belly, and if the spermatic vessels be found in their natural position and connection, then it may be presumed that there has not been any reduction because there has been no sac to return. The part to be selected for examination, and the extent of the cut, must depend upon the information obtained as to the extent to which the rupture is supposed to have reached; therefore it would be lengthways and lower in presumed scrotal rupture than when it has only been commonly protruded through the external ring, and still higher if it have not descended through the ring. When a femoral rupture is supposed to have been bodily returned, the character of the void, if any, and the capability of introducing the finger into the belly through its aperture, will show whether it be peritoneal sac opened, or merely the space which it had previously occupied; and if the latter, the finger must be passed up towards the belly, and the sac, if reachable, brought down and opened. But if there be no cavity of any kind, then it may be presumed that there has been no rupture down, and the cause of the disorder looked for elsewhere.

If the warm bath, bleeding, and the taxis be unavailing, it is advisable that the strangulated bowel should, as speedily as possible, be set free by a surgical operation. Other remedies have been proposed for use previously to operating, with the expectation of favouring the return of the bowel, but they are rarely efficient, and as delay is created by their employment, and no time can be spared when there is fair ground for believing that the operation will most likely be required, it is better not to make use of them.

I may observe that it is far from unfrequent to find patients labouring under strangulation drenched with purgative medicines, the greater part of which, if fluid, is rejected almost as soon as swallowed, and thus the vomiting rendered still more distressing. Occasionally the practitioner congratulates himself on finding that the stomach will retain calomel and colocynth, and hopes that the bowels may be relieved; an expectation, however, which will of necessity be disappointed, if it be bowel that is strangulated. The celebrated Monro primus says that he has more than once reduced a rupture with a smart dose of calomel and jalap. No dependance, however, can be placed on medicine given by the mouth, and therefore its administration that way is useless. Mr. Pott, however, observes, "Though I cannot say I have seen frequent benefit from the exhibition of cathartics by the mouth, yet I have often experienced the good arising from acrid stimulating glysters, and suppositories frequently repeated, particularly from the smoke of tobacco, and from a composition of salt, honey, and aloes, boiled to the proper consistence of a suppository. By these I have seen very alarming ruptures returned, when they have been thought capable of being relieved by nothing but the chirurgical operation."

Such is Mr. Pott's opinion in regard to clysters and it is reasonable to expect by exciting the action of the colon below the strictured part, more especially in those cases where part of that bowel is strangulated, that the gut may be drawn out of the sac, and thus reduction effected.

The use of tobacco clysters, in the proportion of a drachm of the herb to a pint of water, infused for ten minutes, half of which was to be thrown up and the other half after the lapse of half an hour if the first did not produce effect, has been strongly urged by many surgeons, and especially by Sir Astley Cooper. It is, however, a very uncertain as well as unsafe remedy; the great difference in the strength of the tobacco renders it uncertain, as with the same quantity of the herb its active principle may vary considerably, so that it either acts violently or not at all; it is also unsafe, as one person will bear without inconvenience a quantity which will almost extinguish life in another, owing to peculiarity of constitution. I do not, therefore employ this remedy, nor am I disposed to recommend it. The effect of a tobacco clyster is to produce squeamishness and great prostration of strength under which, certainly, attempts at a reduction are more hopeful. But the same effect is produced by a warm bath and bleeding more certainly and more safely.

Vomiting with tartar emetic has also been recommended, and I have seen one or two instances in which reduction has been effected whilst the patient has been suffering greatly from its depressing effects. But I should not employ it, for usually there is already vomiting sufficient, and the efforts made in that action are more likely to force down and increase the quantity of bowel thrust down than to favour its reduction, for it cannot very well be supposed that the bowel will be pulled out of the sac into the belly as the vomiting proceeds.

It must, however, be admitted that any or all of these remedies must be resorted to when the patient will not submit to an operation. In addition to these, cold applications have been made to the rupture-sac, to diminish the size of its contents by emptying its vessels of their blood, and by producing a sort of contraction in the skin, which shall gently constringe the sac and its contents. Monro primus was accustomed to apply cold claret for this purpose with success—a sad waste of good liquor, however, inasmuch as cold spring water would have been as efficient, if not more so—a good example of which is mentioned by Petit, who, having bled eight times a patient with strangulated rupture, and used other remedies without effecting reduction, was on the point of proceeding to operate, when the grandmother rushed in and prevented the operation, saying she would cure the boy in a minute. She then laid him naked on a coverlet upon the ground, and having separated his thighs, she smartly and suddenly dashed a bucket full of water fresh from the well upon his scrotum and thighs, and the cremaster and dartos being immediately excited, contracted suddenly and completely, and returned the rupture.

Ice, coarsely bruised and mixed with salt, in such quantity as to half fill a bladder, and laid on the swelling so that it wraps round it, is, however, more commonly employed; and if ice cannot be procured readily, a freezing mixture of hydrochlorate of ammonia and nitrate of potash, five ounces of each to a pint of water, may be put in a bladder and applied as a very efficient substitute. It is necessary, however, in using great degrees of cold, that the swelling should be carefully watched, or the skin may be found frost-bitten and slough, which occurred to a patient whom the elder Mr. Cline attended with Mr. Sharp. the ice in this case was applied for thirty-six hours, at the expiration of which time the skin became absolutely frozen, extremely hard and discoloured; when warmth was applied the redness and circulation were restored; and the contents of the sac returned with a gurgling noise. About ten days after the integuments sloughed off, but the patient did well.

Under favourable circumstances, after the reduction of a strangulated rupture, the symptoms generally subside: the vomiting ceases, the bowels, usually in a few hours, begin to act without or with the aid of medicine, and the patient is soon restored to health. But sometimes the peritoneum, and even the bowel, have become so inflamed that closely resembling symptoms still continue, and require corresponding treatment with calomel and opium, general bleeding, leeching and blistering the belly or the application of large light poultices; occasionally, indeed, such cases may prove fatal. The strangulation also may have existed such time that the bowel may be unable to recover itself, even when returned into the belly; and the patient dies.

The rule, therefore, in all cases of strangulation is, after failure of reduction by the taxis, assisted with warm bath and bleeding, to advise the immediate performance of an operation as the only mode of cure; and to impress on the patient's mind, that if performed early, it is little dangerous and generally successful, but that the longer it is deferred the less likely is it to be successful, on account not only of the increasing injury of the strangulated bowel, but the setting up or spreading of peritoneal inflammation.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS PANSON, of St. George's Hospital.

MEDICAL CASES.

CASE II.

Phthisis, with Pneumothorax.

George Murram, aged twenty-four, gardener admitted June 4th, by Dr. Wilson. Body emaciated countenance pale; iris blue; pupil dilated; lips thick; bowels sometimes confined, at others too much open; urine high coloured; appetite bad; tongue pale; pulse quick, but weak. He stated that he had had a frequent hacking cough for six months; that two or three times he had spat up with his cough small quantities of blood; that he had lost flesh greatly; and had perspired much. Within the last three weeks he had spit up more blood; had sometimes slight pain at the chest; constant night sweats; and had frequently found his ancles swollen at night.

He now complained of increased pain in the chest, and cough; it was a dry cough, but he had expectorated formerly.

Applic. emp. lyttæ sterno; Haust nitri. c., Vin. colchici, m. xv. ter die; Pil. scillæ c., gr. x. bis die.

June 5. On examining his chest, it was found to be very imperfectly expanded, even on deep inspiration, especially towards the apices; indeed, there was a marked depression under each clavicle. Sound yielded by percussion was short and dull in the same situations; becoming more resonant lower down. Respiration was generally coarse and tubular, and in some places, particularly towards the right apex, accompanied with a loud gurgling; here also bronchophony was very distinct. At the left apex, cavernous respiration, and pectoriloquy, were audible.

6th. He has now much less pain in the chest, and difficulty of breathing. Expectoration has returned; it is in thick rounded masses floating in a quantity of thin mucus.

Perst. in rem.

9th. Complains of much pain in the left side; there is increase of dyspnœa; decubitus on the right side; some anxiety of countenance. There appeared to be no motion of the affected side during respiration, while that of the opposite side appeared to be increased. The left side was also unduly resonant on percussion. All the former sounds had disappeared, except bronchophony towards the root of the lung; and in their place was heard amphoric resonance during breathing over nearly the whole side of the chest; and towards the inferior and posterior part was heard metallic tinkling of the voice.

Omit. rem.

℞. Calomel., gr. ij., Opii. gr. iss. bis die.

13th. Mouth not affected; but pain and dyspnœa less.

Perstet in med.

16th. Pulse 130; profuse perspiration; dyspnœa and pain in side much increased; decubitus towards left side, which is now found to be quite tympanitic, except at the lower third, where a dull sound is given; metallic tinkling has also disappeared; heart displaced, and seen beating to the right of the sternum.

M. s. ad ℥ viij.

17th. Fainted yesterday while being bled, so that the proper quantity could not be taken. Pulse weak and rapid; face livid; dyspnœa and difficulty of expectorating much greater.

Sp. æther, sulph. ♏. xxv.; Mist. camph. c. h. nitri., āā ℥ vi. ter die.; Vin. rubri. ℥viij. ex. aq.

Became delirious in the night, and died before morning.

AUTOPSY SIXTEEN HOURS AFTER DEATH.

Thorax.—On opening the chest a large quantity of air escaped from the cavity of the left pleura. The left lung was driven against the spine, where it was compressed by a large quantity of thin, puriform fluid, mixed with masses of lymph. Both layers of the serous membrane were very much thickened, and covered on their free surfaces with recently effused lymph; the lung itself was, throughout its whole extent, thickly studded with miliary tubercles and vomicæ, some of which were situated close to the pleura; and one of the vomicæ at the anterior part of the lower margin of the inferior lobe had opened into the pleural sac; the opening being about the size of a sixpence, with thick, elevated margins, and covered over with a false membrane. In the apex of this lung was a vomica of the size of an orange. The right lung was also thickened, with tubercles and vomicæ, several of which, especially towards the apex, were situated immediately beneath the pleura, but had not opened into it. The pericardium and heart were pushed over to the right side by the effusion into the cavity of the left pleura. The heart itself was healthy throughout.

Abdomen.—Kidneys large, soft in texture, and coarse in structure. Some of the mesenteric glands were enlarged, and several ulcerations, with tubercular deposits in the neighbourhood, existed in the mucous membrane of the intestines, especially in the appendix cœci. Nothing remarkable in the liver or spleen.

REMARKS.

On this patient's admission he presented well-marked symptoms of phthisis, in rather an advanced stage, and which might be expected to run its course more quickly than otherwise. But an accident soon occurred which tended greatly to aggravate his previous distresses, and to hasten his death: this was the perforation of the pleura by one of the vomicæ. But, as the phthisical lesions were the cause of the accident, it will be right for me first to consider some of the phenomena presented by that disease. As, however, in a preceding case, I have attempted to give a sketch of the first formation of tubercle, I shall now pass on to a consideration of the stage of softening and its consequences, as they occurred in the present case.

When tubercles have existed for some time in the lung, they begin to excite irritation and inflammation in the surrounding texture, from the constant pressure which they keep up. This inflammation, occurring in scrofulous individuals, is essentially of a scrofulous character; serum and thin pus are effused, which soften and break up the crude mass, and convert it into the soft, curdy, grumous matter of the mature tubercle. An ulcerative process is at the same time going on in the surrounding texture, so that several of these masses coalesce, to form one of much larger size. The inflammation, still continuing, keeps up the effusion of lymph and pus, and at last this purulent dépôt, mixed perhaps with the tubercular matter, is partially, or wholly, coughed up through the air passages, and a cavity or vomica is left.

If an opportunity occur of examining a vomica at this period, its surface will be found soft and ragged, and, perhaps, of an irregular form, from the union of several smaller ones having taken place. Its size may vary from that of a pea to that of an orange, or even larger; but these large ones only occur in the upper lobes. Opening into the cavity may also be seen some pervious bronchial tubes, which, from their not having possessed any elasticity, so as to be pushed aside by the tubercular mass, have shared in the ulcerative process, leaving their open mouths, by which the softened matter may find an exit. But a blood-vessel seldom or never opens thus into a vomica, and a most happy circumstance indeed it is, for fatal hemorrhage would certainly instantly occur. The reason why these vessels do not open into the excavations is because, from their structure possessing more elasticity, they are easily pushed aside by the tubercular mass; the blood then being obstructed in its passage, coagulates, and the vessel becomes obliterated for some distance beyond the seat of the morbid process. Occasionally bands are seen intersecting the cavities in various directions; these are said by some to contain blood-vessels, but they are almost always impervious.

Some of these appearances were met with in many of the numerous vomicæ with which the lungs of our patient (Murrain) were so thickly studded; but one of these especially presented several points of interest, its situation in the apex of the left lung being the point where the tubercular deposit generally first takes place, and where the process of softening first commences. Its size and shape being large, and of an irregular form, would lead to the supposition that it was formed from several smaller ones having coalesced, so as to form one of large size. It was also partly lined with a thin membrane, giving rise to the idea that it had existed for a longer time than the others. This membrane consists generally of albuminous lymph, mixed, however, with tubercular matter, and for this reason it never remains entire for any length of time, but gradually becomes detached and expectorated.

This leads me to speak of a way in which cavities may (though it very rarely happens) become obliterated. If there be no tubercles or cavities in the vicinity, and the powers of life are strong, the lining of the cavity becomes organised; the bronchi, by some plastic process, are rendered impervious, so as to prevent the ingress of air, which would otherwise hinder the contraction; the vomica then collapses, presenting the appearance of a cicatrix, and attended with a puckering of the adjacent pleura. But these cicatrices generally contain a small quantity of a pale-coloured, hard, earthy matter, which may have been secreted by the lining membrane; but it is more probable that it results from the earthy insoluble salts of the contents of the vomica remaining after the animal matter has been absorbed. This, however, as I stated before, is a very rare termination of phthisis; much more frequently, the vomicæ increase both in size and number, until the patient dies, worn out by exhaustion, or asphyxied by due aeration of the blood being prevented or cut off by some intercurrent inflammation; or, perhaps, from the combined effects of some or all of these. This happened to our patient in the present instance: probably his existence might have been prolonged for some weeks, had not perforation of the pleura taken place, and occasioned that worst form of pleurisy, pneumothorax.

In the majority of persons who have tubercles or vomicæ, and more especially if they are situated near the surface of the lung, dry, or adhesive pleurisy is excited by the constant irritation which they keep up; this is the reason why perforation of the pleura is so rare; because, in the vomicæ near the surface, the part is secured by previous adhesion. But when it is not previously secured, it is from a want of plasticity in the products of inflammation, and a low state of the reparative powers: such a state as one might, à priori, have expected to find in our patient, from the appearance he presented.

Immediately on the communication being established between the vomica and pleura, the air rushes in at each inspiration, irritating the pleura, and causing dyspnœa; however, as the opening was pretty large, it afforded a ready exit for the air during expiration, and so did not cause such immediate collapse of the lung as it would have done under the opposite circumstances. Affairs might have stood in this condition for some time, had not the pleurisy caused an effusion of lymph, which blocked up the perforation, and thus prevented the egress of the air, permanently collapsing the lung. It seemed, in fact, as if nature had become aware of the fault which she had committed in not throwing out lymph before hand, and had endeavoured to accomplish that object when it was too late; the consequences were fatal to the patient, for the air remained, and sero-purulent matter was secreted in considerable quantity, until the lung became completely collapsed; and the opposite side not being adequate to its increased duties the continuance of life was impossible. The puriform effusion was such as might be expected in a feeble, scrofulous patient like ours; but it may be said that the effusion of lymph must have indicated a degree of power in the system; but it was rather owing to one of those fierce, unequal, and transient flashes of inflammation (excited here by the presence of air in the pleura), which are so often seen towards the close of phthisical cases.

The lung was found pressed flat up against the spine in the form of a thin cake, but capable of being restored to nearly its former volume by insufflation through one of the principal bronchi. Another point in the morbid anatomy was the existence of tubercular disease in the abdomen also; this is of very frequent occurrence, and proves the assertion that phthisis is not only a pulmonary disease: Louis met with it in five-eights of the fatal cases which he examined.

The history which this patient gave was very unfavourable; he had had a slight cough for months, for which he could not assign any reason; he had spit blood, showing that some obstruction to its free passage existed in the lung; he had night sweats, and diarrhœa, which we afterwards proved to be occasioned by ulceration in the intestine; there was emaciation; œdema of the ankles. This last symptom, Dr. Watson says, tells us that the disease is about to terminate, and is therefore valuable as a prognostic sign.

His *general* symptoms on admission gave us pretty positive proof of the nature of his complaint. There were quick pulse, and other indications of hectic, giving evidence of irritation in some part of the system. The nummular woolly-like mass of sputa, which seldom appear except in phthisis. The dyspnœa not absolutely painful, but more a state of breathlessness. His *physical* symptoms confirmed our diagnosis, and showed that he had both tubercles and vomicæ. We found portions of both lungs, especially the upper parts, in a state of consolidation, as evinced by the dulness on percussion, the bronchial breathing, voice and cough. In other parts a bubbling, gurgling sound told us that some of the consolidations were breaking up, and cavities forming. Again, cavernous respiration and pectoriloquy told us that in one spot the tubercular and purulent matter had become evacuated, and that a cavity was left.

We had not had an opportunity of observing these phenomena for many days, before new and equally interesting symptoms arose. There was undue resonance of the left side of the chest, which had before yielded a dull sound; all the previous auscultatory signs had vanished, except at the root of the lung, where strong bronchial breathing was audible, from the circumstance of the lung being tightly pressed against the larger bronchi, and thus affording a solid conducting medium. But the most strikingly characteristic sounds were the existence of amphoric resonance, and metallic tinkling. This may proceed either from the reverberation produced by the air in the distended cavity, or else by the air passing in bubbles through the liquid, which its presence has caused to be effused. The liquid does not seem necessary for its production, as we had not at first any physical signs of its presence, and, indeed, when we had, the sound had ceased, though that was caused undoubtedly by the closure of the aperture.

The ordinary general symptoms of pleurisy were also present. One of these perhaps I may glance at, because considerable difference of opinion has existed with respect to it—I mean the *decubitus*. The patient at first lay on the sound side, afterwards towards the affected side. This is what Dr. Watson has most frequently witnessed, and he explains it in the following manner:—"At first the patient cannot lie on the affected side, on account of pain; but when the pain has ceased, and effusion taken place, the pressure of that would impede the motions of the sound side, and he therefore takes a diagonal posture—i.e., on his back, but towards the affected side."

These general symptoms were not, however, in such a marked degree as the sudden irruption of air generally causes. When the aperture is small, so as not to allow a free egress to the air, the patient may be speedily suffocated, unless artificial assistance be given; and when the aperture is large, as we presumed in this case from the amphoric resonance, the constant rubbing, as it were, of the air against the surface of the pleura in its passage to and fro, generally excites a great deal of inflammation; this, however, passes off after a time, and the patient may live for months after, with tolerable comfort, if he have sufficient lung remaining sound. But it was not to be so with our patient; for after a time violent inflammation was excited, perhaps from the air becoming suddenly confined in the sac; liquid effusion was soon added to this, as we found by the dulness of the lower part of that side of the chest; his pulmonary apparatus became thus too far deranged for the further continuance of life; and he died.

The treatment adopted on his admission was entirely palliative. Colchicum and squill were given to increase the secretion of the pulmonary mucous membrane, the stoppage of which had given rise to congestion; and also to procure more ready expectoration of the secreted matters. On the supervention of pneumothorax, mercury was given, in order to check the pleurisy which was with reason expected. The disease, however, pursued its course for some days almost silently; at last it burst out with fresh violence; blood-letting was prescribed to mitigate the urgency of the symptoms; he was found to be in such a low state, however, that it dare not be proceeded with; so quickly did he sink, that the slight operation of paracentesis thoracis seemed to hold out no hope of relief.

MANCHESTER EYE HOSPITAL.

By A. W. Close, Esq.,
Grosvenor-street, Machester,

Mr. Lawrence's Cases of Gonorrhœal Ophthalmia; Observations on the proper Mode of using the Arg. Nitr., and of its effects.

Locke has written a learned chapter on the "Association of Ideas." He has it, that "There is a connection of ideas wholly owing to chance or custom; ideas that in themselves are not at all of kin, come to be so united in some men's minds, that it is very hard to separate them; they always keep in company, and the one no sooner at any time comes into the understanding, but its associate appears with it." Under some such psychological spell, I thought, on reading Mr. Lawrence's clinical lecture on purulent ophthalmia, "Had he been as faithful to his early medico-political principles and notions, as he has been to the antiphlogistic mode of treating this disease, how different would have been his past career and his present position!" What he was in the beginning, is now, and shall be hereafter, I will not stay to set forth. In many cases, one with amazement hears the arguings, and is astonished at the obstinacy of a worthy man, who yields not to the evidence of reason, though laid before him as clear as daylight. This sort of unreasonableness is usually imputed to education and prejudice, and for the most part truly enough, though that reaches not to the bottom of the disease, nor shows distinctly enough whence it rises, or wherein it lies. Education is often rightly assigned for the cause, and prejudice is a good general name for the thing itself; but yet, I think, he ought to look a little farther, who would trace this sort of madness to the root it springs from, and so explain it, as to show whence this flaw has its original in very sober and rational minds, and wherein it consists.

In Mr. Lawrence's clinical lecture his observations are founded on five cases of gonorrhœal ophthalmia, which were treated first antiphlogistically, and then by the local application of argent. nitrat. Acquainted as he must be, or ought to be, with the opinions of O'Halloran, Guthrie, Walker, Ridgway, Littell, Ricord, and a host of others, on the stimulant treatment (I use this term as being in general use), it is surprising that he has not long ere this given it a satisfactory trial. I am sure he could not intend fairly to test its virtues in the cases here reported.

In case No. 1, the solution, containing four grains of arg. nitr., in one ounce of aqua, was ordered to be dropped in night and morning. The report says, "The first drop produced no particular effect; the second made the eye feel hot and uncomfortable," and on that account it was altogether dispensed with. This was on the 16th of May. On the 12th of the following month, "He left the hospital, well."

In case No. 2, "A solution of the nitrate (gr. j, ad ℥j.) was ordered to be dropped into the eye, and repeated in the evening if found beneficial." The report of the following day states, "The solution was dropped in last night, and the eye felt easier: it was not repeated at bed time." Why not? "It was again dropped in this morning with unfavourable effect." Indeed! what a potent agent the one-grain solution must be!—what homœopathic virulency it possesses! No wonder it was discontinued.

No. 3.—The solution, grs. ij ad ℥j, was ordered to be introduced between the lids two or three times a-day. The report on the following day is, "The swelling of the lids and the chemosis are diminished; the pain in the eye is much relieved" The next day, "Progressive improvement. The caustic solution gives no pain." Not being satisfied with the improvement, although progressive, the solution was made of double strength. The next report is, "The first application of the stronger solution caused so much pain, that it has not been repeated this morning." Some eighteen or twenty leeches were afterwards applied, and two days after the two-grain solution was again used, and the eye went on well"

Case 4.—On the fifth day after the admission of the patient, "the stick of nitrate of silver was passed over the prominent chemotic swelling of the conjunctiva." On the following day it is remarked: He "slept well; eye less painful; the tumefaction of the lids and the chemotic swelling considerably diminished; the discharge lessened in quantity." This was on the 19th. Well; that tells bravely for the sadly maligned nitrate. But, oh ye powers! On the 20th was discovered what nobody ever saw before or will see again. "The cornea is become opaque towards its central and lower portion, for about two-thirds of its surface." Does the erudite lecturer wear spectacles? This change in the cornea is attributed to the escharotic. On the 9th of the following month it "was now discovered that a broad and close adhesion of the lower eyelid to the globe had taken place near the external canthus."

Case 5.—A solution, gr. x ad ℥j, was tried which caused a severe smarting pain for an hour; afterwards slept well." It was repeated on the following day; omitted; the chemosis excised, and then the stick of nitrate was passed over the tumid conjunctiva; prolapsus iridis ensued, and so the matter ended.

In all the cases, the antiphlogistic treatment by cupping, leeches, ant. tart., &c., was first adopted. Mr. Lawrence proceeds to relate two or three cases where individuals had presented themselves at a public institution, nothing at all being, in fact, the matter with their eyes, and having had some stimulant applied to them, inflammation had been set up. One severe case arose from "a small particle flying into the eye, as a person was scraping a stick of the caustic to a point." The inflammation so excited he is pleased to define, "lunar caustic ophthalmia." No doubt the size of the next edition of his "Treatise" will be increased by a lucid description of this new disease. We shall be happy to furnish him with cases of "steel filing ophthalmia," "granite ophthalmia," "lime ophthalmia," "sulphuric acid ophthalmia."

He then gives, and we are glad to get so much from him, two cases to show that the two-grain solution of the nitrate dropped into the eye, two or three times in twenty-four hours, "will cut short catarrhal, and even the milder forms of purulent ophthalmia."

Now, I believe any unprejudiced observer, from the mere outline I have given, and more particularly from the perusal of the document itself, must be struck with the utter pusillanimity, indecision, tergiversation, of the whole affair, so far as the nitrate is concerned The cases prove nothing against, but perhaps something for it. Observe the marked improvement in case No. 4, on the 19th.

It is not my intention at present to say anything as to the use of the arg. nitr., either in solution or ointment. Such applications are seldom properly applied by the patient or his friend. The substance has the advantage of being always applied by the surgeon himself. I am aware that it is very easy at all times to make an assertion—often difficult to support it. But with the full intention of elucidating the statement, I hesitate not to say that all the five cases might have been much more expeditiously and satisfactorily cured by the early and proper application of the arg. nitr. in substance, and that probably without the loss of a drop of blood. If properly used, it never did, never will, produce either opacity of the cornea or symblepharon. These effects in the cases related, either resulted from the disease itself or from a very injudicious manipulatory manner of applying the remedy. I have consulted M. Ricord's work, with special reference to this particular; no such effect is mentioned. "This gentleman," Mr. Lawrence observes, "who has great experience in the treatment of gonorrhœal ophthalmia, uses the nitrate of silver, in substance, in all cases, as he alleges, with invariable success." Be it observed, as to all the allegations we may make, we give a hearty invitation to any surgeon who pleases to come and see for himself, any Wednesday or Saturday morning, at twelve o'clock, a. m., Eye Hospital, South Parade.

Superficial ulceration of the conjunctiva sometimes results from the use of the nitrate. On this Mr. Walker says, "In the vast majority of cases this ulceration is followed by no disagreeable consequences—it is a matter of no importance; indeed, in some instances, it is probable that it may be rather beneficial than the contrary. Yet it occasionally happens that slight inversion of the lid results from it. It has fallen to my lot to witness some hundreds of cases (now thousands) in private and hospital practice, in which the nitrate of silver, in substance, has been employed, and I do not remember to have seen more than two or three cases in which inversion of the lid occurred, and this, in all of them, was so inconsiderable as to admit of being easily remedied. This, as far as I know, is the only solid objection that can be raised against its use." Mr. Walker never saw symblepharon or opacity of the cornea produced by it.

The solution, after it has been used for some weeks or months, is very apt to stain the conjunctiva of a deep olive colour, which when it occurs in young persons, is usually regarded as disagreeable.

Having alluded to Ricord, let us claim for Mr. Walker that which is his due. This I will do in his own words, which will also embody the proper mode of using the nitrate:—"It is my opinion that the antiphlogistic treatment of purulent ophthalmia is both useless and improper. I have never myself employed bleeding, either generally or locally, in any of the cases of this affection which have come under my own care within the last thirteen years. Having for some time previously been in the habit of witnessing the admirable effects of stimulants in the treatment of some other varieties of conjunctivitis, it seemed to me that they might be equally serviceable in the disease in question; and I believe I was the first to employ the nitrate of silver, *in substance*, in this variety of ophthalmia; at least no published statement of any such employment of it had appeared at the time when my paper, detailing some cases in which it had been successfully used, was published (in 1830). The result, as regards my own mind, from my practice with this article in substance is, that I have great confidence in my ability to check by it the progress of the affection; and, at the same time, a conviction that very few, if any, cases of it will terminate unfavourably if this treatment be resorted to before any deep-seated ulceration or sloughing has commenced. The application of the nitrate in substance is easily made. Expose the conjunctival surface of the inferior eyelid, and then draw the stick, pointed like a pencil, *lightly* across it. The application is always productive of increase in the lachrymal discharge, and a severe smarting sensation, which usually continues from half an hour to three or four hours At the expiration of that period the uneasiness subsides, and

a decided improvement is soon perceptible in the condition of the eye."

It is now my duty to present, with a proper regard to the *ne quid nimis*, cases which will speak the *pro et con* for themselves.

I would add that my own observation leads me to think that it ought to be emphatically laid down as an axiom, that if the arg. nitr. be employed, it should be in substance, and at the *commencement* of the disease, or when the patient is first seen. It should be the *sheet anchor* rather than the *dernier ressort* or *coup de grace*. The solution as the disease disappears may become a very good substitute or accessory.

It ought generally to be applied only to the conjunctival surface of the lower eyelid. It ought not to be kept in contact with that texture for a moment, but should be *lightly, evenly*, and with *one* stroke carried along its surface. So used, it is a mistake to apply the term escharotic: it forms no eschar—destroys no structure—the vessels of the membrane, and the membrane itself, remain unabraded—it acts upon the mucous secretion and tears—producing, it is said, with these a chloride of silver, and turning the conjunctiva white: this soon vanishes.

TRANSACTIONS OF LEARNED SOCIETIES.

THE MICROSCOPICAL SOCIETY OF LONDON.

At the last meeting of this Society a paper was read by George Busk, Esq., F.R.C.S.E., on the "Structure and Nature of the Filaria Medinensis, or Guinea Worm"—a disease which the Emperor Henry V. is said to have died of, having had it from his birth.

The author of the paper commenced by observing that the subject of parasitic diseases, and the study of those morbid affections of both animals and plants which were caused by the attacks of parasitic organisms of one or the other kingdom, was so intimately connected with microscopic research, and depended for its ultimate and complete elucidation so much, or it might be said, so entirely, upon the application of the microscope, that the following observations relative to one of the most important parasites of the human frame might not, be considered altogether foreign to the objects of the Microscopical Society.

The author stated that having enjoyed many opportunities of observing instances of the occurrence of the guinea-worm in this country, he had arrived at some conclusions with regard to it which, if found to be correct, would be of interest not only in the particular instance of that worm, but which might perhaps by analogy apply to a much greater extent among the nematoid entozoa. The subject, however, as it related to the filaria medinensis, could not be pursued to the full extent in this country, nor in Europe, it being reserved for the observer in Africa or Asia to fill up the great gaps which, the author believed, yet existed in the complete history of this very troublesome parasite.

As from the rarity of the occurrence of the guinea-worm in this country, few, even among medical men, can be presumed to be very familiar with what is already known regarding it, the author before entering upon the proper subject of his paper, as it concerned microscopic research, briefly adverted to a few of the main points connected with the natural history of the entozoon, which tended in some degree to confirm the conclusions to which he was disposed to arrive from considerations derived from its anatomical structure.

The filaria medinensis, or guinea-worm, was stated to be an extremely common parasite of the human frame in those parts of the world where it was endemic. Fortunately, however, these parts were neither numerous or very extensive, being chiefly certain regions of tropical Africa and Asia. The proper habitation of the worm is in the torrid zone, but it was not confined to that zone, nor did it even occur in all tropical countries. Künsemuller, stated that it was to be met with in Arabia Petræa; on the borders of the Persian Gulph and of the Caspian Sea, on the banks of the Ganges, in Upper Egypt, Abyssinia, and Guinea; from its frequency in the latter country its vulgar name is derived. In some districts on the coast of Africa almost every native coming off to the ships was found to be affected with the worm, whilst in other places distant only a few leagues, scarcely a trace of it was to be met with. The same narrow range has been also observed in India, and the epidemic prevalence of the worm has been supposed to be connected with the periodicity of the seasons. In India, it has been stated by some writers to prevail mostly in the months of November, December, and January; correct observations, however, with respect to the point of *periodicity*, were much to be desired, with reference not only to this, but to all entozoa. In America the guinea-worm is unknown, except in persons who have had communication with Africa, or other parts where it is indigenous. The island of Curaçoa is the only locality in the new world offering an apparent exception to this fact, which it would be highly desirable to ascertain the real state of in this instance.

Though endemic only in the above-mentioned parts of the world, it would yet appear that all races of mankind were obnoxious to the attacks of the filaria when exposed to what might be called the contagion, that is, when placed in circumstances under which it might be supposed a contagious *seminium* could be conveyed to them. This liability was incurred, so far as the author had been able to ascertain, by the exposure of the bare surface of any part of the body to water in which the infection might be supposed to reside, there being, at all events, no evidence at present of any other source of infection. Mr. Busk stated that he had known many instances tending to prove that it was not necessary that a European on the coast of Africa should become infected with the guinea-worm by going ashore, it being quite sufficient for him to have exposed the bare surface of some part of his person to the water in the native canoes alongside.

The mode of its introduction accounts for the frequency with which the legs and feet are attacked by this parasite in preference to other parts of the body, as it would always, the author believed, be found that the men who had become so affected had been in the habit of going about with bare feet, which is common among sailors in warm climates. That the contagious material is conveyed in water is also further indicated by the well-known fact that, in India, where it is the custom for the natives to carry water in skins on their backs, the worm makes its appearance on the back, shoulders, and upper part of the body.

The entrance of the worm into the body was stated to be unattended with any observable symptom, the person affected being unconscious of its presence, until the period when it was ready to make its exit. Mr. Busk observed that the life of the worm might be divided into two periods, and its existence as a whole, or until, as he supposed, its cycle of development was completed, presented at least three, and it might be four, periods or phases; its parasitic life might be divided into one portion in which the worm is latent, and another when it has manifested its existence by external symptoms. The former lasts for a period of from twelve to eighteen months, during which period the worm resides in the cellular tissue, where it does not appear to exert any irritating influence upon the surrounding tissue, no mark of inflammatory or other morbid action being observable on the surface to indicate the locality of the worm. When the period of ripening, as it might be termed, arrives, the worm makes its presence known and its intended exit by perforation of the skin, and various other symptoms, the point of exit being usually marked by circumscribed inflammation, and its prolonged and tedious extraction being accompanied throughout by a great amount of suppuration and pain, according to the mode in which the artificial extraction is proceeded with, which, we believe, is effected with the greatest safety by the patient himself, who generally (having secured the head) winds it round and round a piece of twisted paper at a rate of, as stated by the author of the paper, from one inch to one inch and a-half a-day, until, as Mr. Busk affirmed, upwards of six feet of this intolerable nuisance were extracted; should, however, the patient in extracting it happen to break the worm, the portion left behind gave rise to ulcers of a most disagreeable character, and very difficult to heal.

The whole worm, when mature, was stated to be of a transparent, milky-white colour, presenting an indistinct brownish, wavy streak, running down it longitudinally; it is cylindrical, and about one inch and a half in diameter. Mr. Busk stated that Professor Owen, in the Cyclop. of Anat. and Phys., vol. ii, p. 122, remarked that the caudal extremity of the male is obtuse, and ends in a single spiculum, and even gave a figure of such an individual; but the author could not help thinking that the appearances presented by the caudal extremity in the instance alluded to were referrible to some unusual attenuation of the acuminated point in a worm of the usual kind. No anal or other orifice was perceivable at the caudal extremity of the worm, or any part of its extent; the author therefore believed none existed. The outer integument is described as being white, semi-transparent, firm, and of considerable thickness, highly elastic and extensible, and marked externally with transverse rugæ. Immediately within this elastic integument, two fasciculi of muscular fibres, not marked with transverse striæ, are placed on each side of the body, extending uninterruptedly from one extremity of the worm to the other. The author stated that there was no vestige of any ovarian tube, and the only apparent outlet for the young was the open extremity of the parent; consequently, it would appear that the rupture of the body was necessary for the escape of the offspring, which are described as being amazingly numerous, constituting, in most instances, the bulk of the contents of the animal's body; when expelled they are described as being scarcely visible to the naked eye.

Mr. Busk gave a curious instance of the tenacity of life of the filaria medinensis, which, he stated, would revive after having undergone a considerable degree of dissection. In the case alluded to, in which extraction of the worm from the body of a patient was going on by the man himself, whilst one evening pulling at it, he broke off a portion about four inches in length, and in order to preserve the worm for the purpose of showing it to the author, he placed it between the leaves of a book, and on the following morning it was found quite dry and flattened. Being desirous of examining the structure of the worm, this dried portion was placed in some lukewarm water in order to soften it. On looking at it a short time afterwards, Mr. Busk was much surprised to find it in active motion, which continued for some hours.

The above paper, and those of Messrs. Gulliver and Quekett, reported in this journal only, are the three most practically important papers read at the Microscopical Society during the present session.

REVIEWS.

Letters on the more evident Changes which the Body undergoes, and the Management of Health from Infancy to Adult Age. By C. Black, M.D. Post 8vo., bound, pp. 138. Whittaker and Co.

This is an unpretending little volume, chiefly addressed to the profession and the educated public. To the former it presents nothing not already known, and yet it embodies in the compass of a few pages a great amount of very valuable material; to the latter it commends itself chiefly, because the facts and inferences with which it abounds are such as cannot fail to prove useful to all who may choose to obtain and apply them. Many of the precepts are of excellent construction, and the whole shows the author to be well read in the most recent and important discoveries in the auxiliary sciences of his profession.

Whilst, however, we gladly pay this tribute to the meritorious parts of the work before us, we cannot, in justice, pass over certain passages of its literature without an unequivocal expression of dispraise. Here, for instance, is a ridiculous rhapsody:—

"Here I close my remarks on this important period; here, also, I take a temporary farewell of my subject. But few shall be the matin songs that shall swell on the breeze, and short the flickering

of the glow-worm's lamp, ere I return to my task, and once more revisit this harp of ten thousand strings, again to strike its silvery chords—again to interest you with the harmony of its notes, and to excite your mind to reflect on this masterpiece of creation—man!" (p. 62) Now, all this tapestry of verbiage, to tell us the subject would be resumed on some future occasion, seems very much like a piece of unnecessary trouble.

At page 117, and just over the leaf, we have the following:—

"Notwithstanding the vast—the sublime attributes of the Deity—and the apparent insignificance of those with which the mortal mind is endowed, great and merited praise obtains to that person by whom one seemingly hidden path of Omniscience is discovered, in which his imperishable footstep is exhibited amidst the *overwhelming shadows* of *celestial light*." Dr. Black's head must have been topsy-turvy when he committed this freak of authorship.

A little lower down, in page 118, is a specimen of rhapsody running riot after this style:—

"Shortly after this, the sun of knowledge proudly and majestically appeared above the murky horizon of medical science, and although its effulgent beam was for a time intercepted by the tenebrious mist in which the mental world was enshrouded, it still continued its upward course in the heavens, till, from its meridian height, it no longer shone upon a single vesture of its recent pall, but, with meteoric splendour, shed a lasting halo around the head of its illustrious discoverer." That a man of Dr. Black's scientific competency should string such arrant nonsense as this, is really too bad. The habit of writing in this mock-heroic strain is a growing one in our profession, and we grieve to see it. We earnestly desire to see good, substantial, and simple English, a feature in our national works; and our future authors may assure themselves that, in proportion as they deviate from this, in that very proportion will we punish them for their literary barbarities.

TO CORRESPONDENTS.

S. D.—*There is no law prohibiting any class of persons from commencing business as druggists.*

N. *should apply to a properly qualified medical practitioner. We make it a rule never to answer questions which demand a professional opinion of any kind, as we conceive such conduct would be treachery to the rights of our professional brethren. Medical opinions, from the case with which they are obtained, are generally esteemed too cheaply.*

Chirurgus *must form his own opinion respecting the value of the degree in question; any answer from us would be invidious.*

Why does not A Constant Reader *obtain the licence of the Apothecaries' Company? At present he is certainly liable to prosecution.*

Mr. Morris *will excuse us for the present. Our crowded pages, and the frequent publication of enlarged numbers, are, we should think, sufficient proofs of our desire to afford the profession information of the most valuable quality—by no means stinted as to quantity.* Mr. Morris, *we have no doubt, notices that original communications are at present almost entirely omitted to make room for lectures, and that even of these we have more courses under publication than we are able to continue every week, in consequence of want of space—the* Medical Times *being already the largest medical journal published in Europe. At a future period, however, when some of our present engagements are concluded, we hope to be able to oblige Mr. Morris and many other correspondents, to whom at present we can only offer a general apology.*

We are so frequently asked as to an eligible house for lunatics, that to avoid much unnecessary correspondence we may say at once that we have no personal acquaintance with any establishment of the kind, except that presided over by Dr. Costello, which, to our convictions, answers, both as regards site and administration, all the requisites of a model asylum for lunatics.

A. B.—*In our last* Pharmaceutical Number.

M. D.—*We think not. Giessen diplomas are in future only to be obtained by submitting to examination, thanks to the* Medical Times.

Mr. Startin's lectures will be continued in our next.

A Young Surgeon —*Chelius'* System of Surgery, *translated by South, will suit our correspondent's views.*

Many letters of correspondents are unavoidably postponed till our next number.

THE MEDICAL TIMES.

Saturday, May 16, 1846.

> An' if a man did need a poison now,
> Here lives a caitiff wretch would sell it him."
> Shakspere.

Ever anxious to maintain the interests of the General Practitioners, we feel called upon to notice, at some length, the covert attempts which the Pharmaceutical Society are now making to gain the support of the public and the profession, for the provisions of a bill to regulate the practice of their members They are walking cautiously and deviously to their object; but, nevertheless, have not been able to conceal their tortuous proceedings from the censor's eye. We should have refrained from descanting upon the subject at present, if our contemporary, the Medical Gazette, had not, last week, in one of its usual twaddling, yet insidious, articles, advocated the cause of the druggist, and advised the enactment of this bill prior to any legislation for the General Practitioners.

This policy may very well accord with the wishes of the few pure physicians and surgeons, who still hang on as patrons of that journal; but it would be most pernicious to the interests of General Practitioners. There can be no doubt that the consulting practitioners of this metropolis would willingly play into the hands of the chemist, with whom they are already leagued by practice and usage; and would rejoice at any measure of legislation that promised to embarrass or defeat legislation for our own profession. It may accord with their sympathies, principles, and interests; they have shown themselves, during the whole of this struggle, the enemies of the General Practitioners, and we are not surprised to find them the suggestive advocates of a measure which, *in its present form*, would be advantageous to themselves, but highly injurious to the great body of the profession.

It may suit the physicians and surgeons that chemists, who prepare their medicines, should be educated even higher than these duties absolutely require. But will it be satisfactory to the General Practitioners? We think not. Education is a great boon; it is daily claiming its rights, enforcing its authority, overturning all timeworn, exclusive and obsolete institutions, and reorganising into unity and vigour, all the discordant elements that have hitherto checked, though transiently, our social advancement. Order is the characteristic of our day. Education has broken up the components of a past state of society, and, having scattered them asunder, it is now, magician-like, reuniting them into new forms, and building up new systems from a disrupted chaos. We feel the power—we own it—and we are the last persons to struggle against its resistless dominion.

We object, however, to that scale of education that may be above the standard that particular duties require, yet far below the standard which other duties, individuals may be tempted to execute, demand. The Pharmaceutical Society wish to examine their members in *materia medica, botany, toxicology, &c.*, as matters relevant to their business as chemists and druggists. It may be so; but we defy a man to study materia medica in a proper manner without dipping into therapeutics, and hence into the whole domain of physic, so far as it is required for merely practical purposes; and toxicology directly leads to a knowledge of the effects of poisons on the system, which involves a certain knowledge of morbid anatomy and of disease generally. Will the Council of the Pharmaceutical Society invent a scientific bed of Procrustes for their students, and say, "thus far shalt thou go, and no farther?" This is exceedingly idle. They cannot fetter the minds of their members. As they learn the prescribed circle of studies, their minds will expand, and they will desire to learn more. More they will learn, and fancy themselves competent to the cure of any disease which may be presented for their opinion. Nay, more, it is the genius of every modern institution, as it is of the individual mind, to extend and elevate its scientific character. The Medical Profession have no guarantee that the Pharmaceutical Society, in following out its principles, will not seek to educate their members yet higher—to communicate some knowledge of anatomy, both healthy and morbid, and of the symptoms of disease, in order to prevent those serious accidents that may arise from ignorant counter-practice. The legality of counter-practice being once established (and we are sure that the Pharmaceutical Society cannot, and will not, attempt to interdict it), then a medical education is an absolute necessity. The Pharmaceutical Society would advocate it on a principle of common sense and public justice; and where is the defence for the General Practitioner? The Council of this Society profess to place a ban upon counter-practice; but it is a mere profession. Mr. Jacob Bell or Mr. Morson may denounce it, and be earnest in their denunciations, but they are not the whole body of chemists and druggists. It is *for their* interest to abandon counter-practice; but it is the interest of nine-tenths of their brethren to do directly the reverse, and it would be mere childishness—mere senility—to profess to legislate for any class contrary to the interests of that class. These professions are very silly. We have to deal with realities—with stern, unyielding facts—and it is our duty to estimate them at their true value.

In the low neighbourhoods of large towns, and in the provinces, the most profitable practice of the druggist—that, in fact, by which he pays his rent and taxes, and feeds his family—is counter-practice—an illegitimate encroachment on the duties of the General Practitioner.

Unsatisfied with a single administration for a sudden emergency, he continues, day by day, to prescribe his poisons, until death or disgust deprives him of his patient. The Pharmaceutical Society may profess to discountenance these proceedings, but they have studied but ill the genius and usages of their brethren, if they imagine that they can be successful in their legislation, by resorting to measures that shall cut off the economical resources of the majority of their order. They know better; they do not intend to do so; they will enclose all within their fold who will consent to join them, and then they will make the best bargain they can with the Parliament and the Profession.

For people to profess to commence legislation with restrictions upon their own members, is a mere hoax—a political chicane—which is employed merely to secure a more favourable consideration

of their plans. If they begun their labours with such an amiable simplicity of heart, we apprehend that the rapid defection of their members has taught them the folly of such a chivalrous Quixotism of conduct. Bye-laws and codes of honour have ever been inoperative for good. What they, however, cannot do, it is possible that some other body might; and since it is apparent that a restrictive power must reside somewhere, it is full time for the parties whose interests are engaged to determine where this power should be placed.

This question naturally leads us to the issue:—as to the propriety of legislating for the druggist prior to legislation for the General Practitioner of medicine. In the name of the General Practitioners of the country we protest against such an attempt. We declare that such a procedure will be the harbinger—nay, the accomplishment—of a fraud upon the General Practitioners. The Licentiates of the Society of Apothecaries are the only legal dispensers and sellers of drugs; the grocers, under the name of druggists, have usurped their functions, and now daringly attempt to legalise the crime. They should, at least, consult the wishes and seek the sanction of the parties they have injured before they set the seal upon this act of usurpation. Mere decency would have required so much courtesy at their hands. With a sophistry and hardihood becoming the original fraud, they say to the General Practitioner, "Do not interfere with us, and we will not interfere with you; let us enjoy our rights, and we will not molest yours!"

What, indeed, are the rights of the druggist? Have they not obtained all they possess by poaching upon the province of the General Practitioner? Fraud is their privilege. But stay: if a medical man, in the legal prosecution of his inalienable and immemorial right, sell a dose of medicine, he is charged by these persons with interfering with *their rights!* We want a word sufficiently courteous, yet sufficiently strong, whereby to designate this conduct.

Thus much, then, for the actual rights and legal position of the two parties. If the druggists think that we have stated the case too boldly, they must, at least, allow that it is perfectly true. Let us, however, take things as they are. We will admit the usurpation; we will suffer them to pursue the trade they have engaged in; we will abandon to them this portion of our duties; we will recognise them as a part of the established order of things, which we have neither the power nor the will to set aside. The trade in drugs is, then, their especial duty; and beyond this they ought not, in law, to be allowed to pass. Reserving to ourselves the practice of medicine, we forbid any further encroachment upon our duties. The druggists may claim to themselves the *citizen's right* of prescribing for any individual who is witless enough to ask them to do so, but we deny, in toto, that they should possess this right as a profession. A profession should be invested, in law, with certain definite powers and functions, or there is no use whatever in erecting a body of men into a profession by law. This is the nature of the thing. Moreover, when a man becomes a member of society he is obliged to relinquish many of his natural rights in order to promote the general good; and thus when a man enters a profession, he expects to enjoy certain special benefits, for which he consents to sacrifice some of these so-called citizen's rights. This is the common sense of the matter: if it be not so, abolish all professions, for they are equally useless and irrational.

We deny, however, this abstract *citizen's right*, on which the druggists rely, so much, for their justification. No man has a right to hazard the life of another; although he may have a citizen's right to do what he pleases with his own. The druggists have no right in statics, ethics, or religion, to do anything that may endanger the health or cause the death of another individual. Ignorance is not a crime in itself, but it is a crime to act in wilful ignorance. The amount of knowledge required for any specific act in which the life of another is implicated, may be conventional; but the state should require this amount to be obtained. This amount is determined by the aggregate knowledge of the learned, and by the condition of science, and the state which is the representative embodiment of this social wisdom, should require, in the due exercise of its chief function, the security of individuals, that this conventional amount of knowledge should be possessed by all men who are desirous to take upon themselves the responsible duties which ought not to be exercised without due sanction or delegation from the state. This is, in fact, the theory of professions. No man can have a citizen's right, who does not subscribe himself a citizen; to be a citizen a man must sacrifice many of his natural rights. And we declare that in the case before us, the druggist has no such citizen's right as he avers.

Seeing, in short, that the claims of the druggists to any part of the practice of medicine are indefensible, and that their indirect counter-practice can only exist by toleration and indulgence, we require at the hands of the State a restriction upon such unlawful practices. This restriction may reside either in the hands of the Government or in a council of our own. This is of little consequence, provided it be simple, efficacious, and of prompt application.

Again, we protest against legislation for the druggists in anticipation of medical legislation; for we know not how much trickery may be employed in Parliament to pass a measure detrimental to our rights and interests. We have the first claim, and when our position and privileges are established, we will cordially assist the druggists in obtaining a legislative enactment for themselves. Their object, in the main, is a laudable one, and we only request of them to make no attempt *"to remove their neighbour's landmark."* We are prepared to support any plan that shall define the position, determine the rights, and increase the respectability and usefulness of the chemists and druggists. Further we go not.

———Notandi sunt tibi mores.—HORACE.

WE last week adverted, in general terms, to the annoyances which medical men are in the habit of receiving from a certain class of mendicants, and itinerant salesmen. But there is another set of adventurers still more formidable, who come with a sort of *a priori* claim to one's regard, and are seldom unsuccessful in their appeal to one's benevolence. The class we allude to, are those who affect to belong to the profession, and to have been once better circumstanced than at present we find them. There is an uncommon irresistibleness in an attack like this, and right well must a man be on his guard to prevent it assailing the very depths of his pocket. We are by nature charitable, there is no doubt of it; and by custom rendered still more so, there is no doubt of that—and as few men are farther-sighted than they need be, it is no wonder, that most men should be, in some sort, liable to deception. Mendicancy, all the world over, is more a system of voluntary imposture than of necessity—everybody knows it is, and yet, scarcely anybody fails to commiserate the starveling of the street, even though it be doubtful whether he deserve one touch of pity. The fact is, amongst the many weak sides of human nature, one of the weakest is compassion; because it rarely pauses to consider the merit of the objects upon which it expends itself. This compassion, manifesting itself in indiscriminate benevolence, is one of the unavoidable consequences of *sympathy;* which we are inclined to regard as belonging rather to our physiological, than to our pyschological constitution. It is for the most part a very instructive sort of affair, for perhaps in nine cases out of ten, the man who carelessly drops a penny into a beggar's hat, does so with about as much thought and meaning, as he would resign himself to a fit of gaping, if he saw the beggar in the act of enjoying the same luxury. Does he yawn out of a love of imitating the grimace of a man he never saw in his life before? No, he yawns because he cannot help it, and it may even be, that the act is committed with some suspicion of a sacrifice of self-propriety. But so it is, instinct wars with volition, and gains the mastery of it. There is very much of this in alms-giving—the act has often neither meaning nor measure in it. Dealers in promiscuous charity, if they considered well the *cause* of their benevolent promptings and performances, would frequently find it akin to that natural weakness, which suggests a sigh and a tear, at the sight of a tragedy, which we know to be nothing more than "murder in jest." But it is due to the discretionary part of our nature to limit these vagaries of sympathy, and relieve the judgment of a charge of deliberating blindfolded. Indiscriminate kindness generally carries a curse with it; for it rarely fails, in some wise, to light on those who not only do not deserve, but are pretty sure to make corrupt use of it. Besides that it unworthily supplies the vicious with incentives to wickedness, it withholds from the virtuous the recompense that is due to them.

We offer this preface, as being, in our opinion, a not unfitting preliminary to a consideration of casual medical charity.

One of the most pitiable of living pictures is a fellow-creature, either alone, or with dependents upon him, degraded in spite of himself, and by an incontrollable fortuity reduced from worldly respectability to destitution! Over a sight such as this, sorrow and sympathy may utter their condolence in all the latitude of unfettered feeling! It is not a subject needing any imagination to pourtray, or any eloquence to appeal for it—its reality may be seen any day in our profession—and it pleads its own sufferings with a pathos sincere and irresistible. Such a case is one which ought to insure our cordial commiseration, and the best services of our bounty. It is an obligation we owe to the finer feelings of our common nature, to give them the opportunity of exercise, when an occasion like this falls in the way of their duty. Our instinctive faculties would prompt us so to do, and the more refined our intellectual and moral constitution, the more readily would it acquiesce in the suggestions of feeling.

The difficulty, however, is not so much to find sympathy for suffering humanity, as to find humanity that we are sure deserves sympathising with. There is no lack of the latter, we grieve to say; but it sometimes requires a very nice discrimination to distinguish between this, and the grosser variety that affects its resemblance. Hence, the temptation to deceit, and hence, also, the success with which deception is practised.

Upon no class of men is it practised more unsparingly, or more profitably, than upon the members of our profession, and for the very reason we gave in our last article—viz., because they are accessible to all comers, and few come appealing to their beneficence without departing well-satisfied with its efficacy.

One of the commonest tricks adventured upon us, is for a mendicant to present himself with the usual formality of a specious bow, and it may be, an unaffected offer of his hand, at the same time giving us to understand that he is a medical man who has called upon private business. This, of course, turns out to be, the communication that he is not quite so well off as he could wish to be and would gladly avail himself of the temporary accommodation of any trifle that can be conveniently spared. An ordinary beggar you can easily dispose of, if you have any doubt of him; and if not, he will free you from his presence if you give him a penny. But you cannot so readily dispose of a man "who has seen better days," and therefore, has a direct claim upon your good nature or, who, being a member of your own profession, can shake your hand with the frankness of fraternity. A man of this sort staggers you at once, and draws upon your bountifulness before you have a chance of stopping him. If it happen that he deserve all the liberality he receives, no fault can lie in the matter—and though your pocket should be emptied in the interview, there is little likelihood that you will sleep the less, or sigh the more, for having contributed largely to save an unhappy fellow creature from ruin. But if the reverse happen, the reflection is far from agreeable, that you have aided the adventures of a rascal and committed yourself unsparingly to his ridicule It must be remembered that rogues always laugh at those over whom their duplicity triumphs Unfortunately, however, we have no sleight-of-hand, no talismanic touch, no sign, manual or mental, nothing, in fact, to tell who are really of our fraternity, or not. Manner and method are a regular letter of recommendation to us, and though they may often deserve to be of the Bellerophon order, we have seldom enough of discernment or discretion to make them so. They dupe us, and it is our own fault that we deserve it.

We have often been placed in the difficulty we speak of, and have felt how hard a task it is to get out of it with justice, and at the same time without any sacrifice of generosity. Many a man has bowed us into a return of the compliment, and talked us into a charity we had better have avoided, whilst we have all the time had a doubt of him, and yet have been utterly unable to say so, or to proceed in anything like a systematic way to prove him an impostor. Some men have the happy facility of wheedling you out of your charity with such grace and readiness, that you are not sensible of your loss until it is too late to redeem it. Sheridan, as everybody knows, was one of this facile sort; and one of his greatest money-lenders used to vow his dread of asking the return of the principal, lest, in doing so, his debtor should borrow some more. There are plenty of small Sheridans to perpetuate the fame of the original; and though less dexterous, they may not be less dangerous, than their great originator. We speak from experience, for we have often suffered from their visitations, and are therefore not unprepared to warn others against their aggressions, or to caution them how best to prove their authenticity or imposition.

To deny, or even to doubt, *sans ceremonie*, the statement of a man who decently appeals to your favour, is to perform an not very inconsistent with the motives and manners of a gentleman. For this reason, therefore, it is no easy matter to give flatly, a denial to a mendicant who may come to you, affirming that he is a doctor out of place. At least his word is as good as yours, in the ordinary acceptation; and, in this case, it ought to be much better, seeing that he has had many more opportunities of becoming acquainted with his own station, than you have had of even learning the outline of it.

This is a difficulty we have encountered full often, and have found only one way of overcoming it. Our plan is, when a candidate for charity comes before us, prefacing his claims to commiseration on the ground of being, or rather having been, a medical practitioner, to say we have no reason whatever to doubt his word, and have therefore, no hesitation whatever in asking him a few professional questions. If he be a man of such decent exterior as to require that he be treated with some professional or conventional politeness, we commence the investigation by a discourse upon medical practice in general, and by degrees getting into particulars, so as to arrive at a pretty clear knowledge of his acquirements. The adventurer soon shrinks from this method of searching him, and suspecting the purport of it will feign illness, engagement, anything, rather than risk the scrutiny. He generally finds a sudden occasion for departure, and never fails to forget the immediate object of his visit. He has cunning enough to know that it is useless to ask for charity from a source already suspicious that he does not deserve it. It is needless to say that the reverse character rather courts conversation than shuns it—anxious to show what his merits are, and how poorly they have been requited.

There is a less formidable (fashionable, we mean) class of *soi disant* professional applicants for one's bounty, whom we are accustomed to dispose of summarily, with or without relief, as the case may appear on scrutiny. To such applicants we are in the habit of saying, we have no knowledge of you, or of the circumstances you represent, yet shall be happy to afford you some relief, provided you can give us proof of the sincerity of your statements. Singularly enough, they have invariably expressed their readiness to furnish every proof we wanted of their professional orthodoxy, and yet, in by far the majority of cases they have been utterly incompetent to the task they adventured. The tests we have employed, have been simple conversation concerning the present and past state of physic, or any of its relative sciences; a request that the applicant would give a translation of a passage in the book put before him (Celsus, Gregory, or the London Pharmacopœia); or give the name and description of some bone or anatomical specimen submitted to his scrutiny. In some of these cases we have met with extraordinary characters, who have drawn largely upon our mirth, compassion, or contempt. They are striking enough, however, to deserve that we shall give them consideration and comment in a subsequent article.

THE HOMICIDAL MANIA.

It is known that Mallard, the pawnbroker from whom Wix purchased the pistol with which he shot Bostock, his master, was the shopkeeper from whom Graham subsequently bought the pistol with which he shot the stranger, Blewitt. This fact, sufficiently striking of itself, is made more remarkable by the pawnbroker's evidence, which tends to prove that, what looks likes a mere coincidence was, in fact, but the operation of a moral law, and that where the appearance was an accident, the reality was a principle. "*Immediately*," says the pawnbroker, "*after the assassination by Wix, I received a great many applications for pistols, and now, within the last few days*," (after the second tragedy) "*several persons have applied to me for the same thing*. I am now determined, however, never to sell another." Passing by the very proper resolve adopted by this tradesman of mishaps, we find in the fact he records, a startling revelation of the mental condition of a portion of that public authors and orators are so fond of bepraising. To many of our London denizens there would appear to exist a fascination about the circumstance of murder. About us and near us, arrayed in all the externals of common sense and charity, are persons endued with a mesmeric sensitiveness to the horrors of homicide, from the very intensity of whose abhorrence of crime arises an interest for it, tempting and fascinating them to its commission. The spot—ensanguined by the tragedy—becomes to them a centre of attraction: it is hallowed ground. A pistol from the shop of the murderer's choice acquires additional value: for weeks and months after the catastrophe there are minds (of people at large, too) meditating and brooding over its exciting incidents, and a lust for imitation fastens on the morbid brain that wants nothing but a favourable opportunity to make crime irresistible. Graham, the youth of fifteen, has scarcely got possession of his pistol from the shop that supplied his murdering predecessor, when he kills with it one of the first persons approaching him, and this, too, in the very scene of the former tragedy. The associations of the deed and place were too powerful for him. So placed, the smallest circumstance sufficed to enkindle and educe the latent mania. The mere jostling in the street against a female—a stranger to him—excited the morbid propensity beyond control. By some caprice or accident she and the next comer—a journeyman printer—though threatened, escaped —the third fell. So strange—so sudden—so undistinguishing was the homicidal *fit*.

Forgetting for a moment a general question that here uprises, let us say a word or two on the extent of the boy's moral and legal responsibility. The moral guilt will depend on his intentions, knowledge, and freedom of action. These, separately or conjointly, form the elements of all human merit or guilt, and under either of these, we fancy, in this case it would be difficult to attach a heavy culpability—if any. There was, undoubtedly, a raving—*an intention*, if you will—to destroy, but it is far from clear that the *intention* directed itself to *human* life, in especial, and it is quite certain that it did not to any particular individual. The essence of intention was, in fact, wanting. *Materially* there *was*—*substantially* there was *not*—an intention. A brute instinct was in operation, not the volition of a reasoning entity. On the question of *knowledge* the case is still stronger. To act with knowledge almost necessarily presupposes a motive, and enforces some little attention to consequence. Here there was none. There was no hate, and no cause of any; no hope of advantage, and no chance of any. No wish for escape; no expression of regret or joy when the act had been perpetrated. In fact, a knowledge of what he was doing—all motive being absent—presupposes the existence of an organic cerebral disease, making him the victim of an irresistible compulsion. To know what he was doing—as the case

stands before us—and still to have done it, would have been to labour under an insanity of the very worst kind; the ordinary principles of human action could have had no more influence on him than on the most excited inmate of Bedlam. So that, under any hypothesis, the inference is all but resistless, that in the act before us there was a want of intention—of knowledge—or of freedom: or it may be of all three: a want which, as far as our judgment can see, does relieve, and should relieve, the agent of the heavy burden of moral responsibility.

Connecting with these general considerations the peculiarities of the boy's character and person, great force is added to our inference. His dress was peculiar—his look "sallow and bilious." There was in his mental constitution an inexpilicable love of fire-arms. Shooting was a passion with him. His room was a shooting-gallery; he collected around him books on shooting; he was proceeding to take lessons in shooting when the humour of killing somebody took possession of his mind. There, seems, in fact to be a diseased organism in the boy, which, *à priori*, admonishes us that without any actual viciousness he would be capable of acts the most irrational and outrageous, on impulses the most sudden and bizarre, or on external excitations the most trifling and singular. We are not of those, however, who would identify necessarily *moral* with *legal* responsibility. In ethics, we condemn in relation to the actual departure from some admitted standard of right: in law, we punish in relation to the effect which penalties have on society. Thus, law may at times justly be severe, where the moralist is as justly lenient; and the moralist be rigorous where the law is lax. We grant, therefore, that the jurisprudence of our country may, not unwisely, look with a jealous eye on the attempts made to palliate by novel pleas of an equivocal species of insanity, breaches of her ordinance. The insanity so mischievous might be encouraged and increased by the example of impunity, as it might be checked and cowed by the evidence of striking retribution; and the rightful defence granted to one afflicted mind might be made the cunning shelter and cover of a hundred calculating villains. But while admitting that the sanctions of law adapt themselves more to the exigencies of society than to any abstract proportion to the code of moral wrong, it still behoves us to say that the latter idea must not be recklessly violated in legislation if we mean to purvey to the social well being; and that to doom a person in the pschycological position of this youth to the disgraceful end that was supposed to be in measure to the decisive criminality of a Corder and a Greenacre, would be a revolting instance of cruelty and startling injustice, that would not only throw discredit on all jurisprudence, but make it fail in the very end of its being. Such things shock justice and disorganise the social system.

We have left ourselves little space for observation on the general question to which we adverted, viz., the existence of a form of moral mania in many persons moving at large in society, whose morbid instincts or propensities, varying often in their tendencies, are roused into ungovernable action by excitations derived from the excitement of notoriety, or the fascinations of example. There is no mental delusion; the intellect is much as usual; there is the customary sense of right and wrong, though unused and unthought of in the excitement, that holds possession of the whole person. All that is at fault is some perverted feeling. A natural passion, from some form of physical disease existing in the brain, acquires an unusual and complete predominance, and succeeds either in setting the intellectual faculties at defiance, or making them subsidiary to its violent impulses. If the diseased propensity be that which refers to the acquisition of property, we have theft under all circumstances; so that persons have been known who would not eat their food unless they had first stolen it. It is thus also with enormous madness, suicidal monomania, and incendiarism; but it is in homicidal mania that we look for the most striking illustrations of this mysterious form of cerebral disease. The instances on record of the dreadful exercise of this perverted instinct, under circumstances the most peculiar and afflicting, are numerous and well-authenticated, and the law is now well established among cerebral physiologists, that to persons thus diseased the latent impulse—the lurking demon—is often forced into resistless action by the influence of a striking or notorious example. One startling and celebrated murder is the sure herald of several. The notoriety attracts to a congenial crime the diseased minds of thousands; a morbid sympathy is created; there is fascination in the gulph; the diseased propensity is stimulated, excited, and made to overwhelm both volition and reason. The last agency wanted is supplied to make the madness culminate.

In this fact, or rather law, there is much that may be pondered over with scientific advantage by the physiologist, but to the makers and administrators of our country's jurisprudence it is of an importance not to be exaggerated. In the conduct of public inquiries in the execution of the last ordinances of the law, there is a parade of "*spectacle*" and dramatic effect which might be avoided with advantage, if we would not seek to cultivate the morbid or depraved tendencies of our population; and in the application of the rules of justice to offenders it might not be amiss if our judges were to attach themselves less to the cold, ignorant, and prejudiced dicta of old legal authorities, and pay more homage to the well-rounded discoveries of an advanced and rapidly improving science. It is certainly no honour to the humanity of England, and no distinction to the discrimination of her judges, that she has ever and anon—even in these days of physiological advance—a maniac dangling on her scaffold as a criminal.

MISCELLANEOUS CORRESPONDENCE.*

HICKMAN *versus* DICKENSON.

[To the Editor of the Medical Times.]

The charge of the judge to the jury, in the case of Hickman *versus* Dickenson, lately reported in your spirited journal, was manifestly wrong; as not borne out by the evidence which was elicited on that interesting and important trial.

What are the facts of this deplorable case? A young and previously healthy woman lay dying from uterine hæmorrhage, connected with, and kept up by, retention of the placenta, after delivery of her first child. A surgeon was sent for. He did not arrive until nearly two hours had elapsed from the reception of the summons.[1] The gentleman appears to have been well aware, as all enlightened practitioners in obstetrics must be aware that the hæmorrhage would not subside until the placenta had been removed, and the orifices of the bleeding vessels in the uterus had been allowed to close by the consequent contraction of the organ. Under this impression, Mr. Dickenson introduced his *hand* into the vagina, although in no very determined or workman-like manner; and withdrew what he believed to be the placenta, and subsequently shewed to Mr. Best, on his arrival, as such. Mr. Best, however, with his natural acuteness of observation, at once discovered that the supposed placenta consisted merely of some coagula of blood and skin,—probably a portion of the membranes of the ovum; and proceeded, with his characteristic decision and intrepidity, to extract the placenta, as the only chance of saving the woman's life.

The proceeding of Mr. Dickenson proves, beyond all doubt, that he was clearly acquainted with the modern practice in such cases, and understood his duty. But that he should have lacked presence of mind and courage to perform it effectively, and that he, a regularly-educated and experienced practitioner, should have mistaken a clot of blood for the placenta, are circumstances explicable only upon one hypothesis; which, in my present state of ignorance as to its correctness, I should deem it alike ungenerous and impolitic to advance.

Had Mr. Dickenson expressed to the attendants of the unfortunate woman, his opinion as to the inexpediency, or danger, of making any attempt to remove the placenta, in her exhausted condition; and had he, in conformity with such opinion, abstained from all efforts for its removal, then might the judge, with some colour of truth and consistency, have interposed his plea of diversity of obstetric practice, built upon an exploded opinion of the late Dr. Denman, in behalf of the defendant; and, peradventure, been justified in his rude attack upon the character and feelings of Mr. Best. But how the judge could have advanced such an argument in justification of Mr. Dickenson, and *in direct opposition to the practice which the defendant had, himself, unsuccessfully because inefficiently, pursued*, I am utterly at a loss to comprehend.

Upon the elders of my profession I presume not to obtrude unsolicited counsel. But should any one of my younger brethren, in general practice, meet with such a case as that upon which I am now commenting, I earnestly exhort him, after the administration of a suitable stimulant, and the application of cold, with pressure, to the abdomen, to set to work with a *bare arm* and cool, yet determined spirit: and, in nine cases out of ten, he will have the unspeakable gratification of rescuing his patient, in the hour of her extremest anxiety and peril, from otherwise inevitable death.

Nor let him be discouraged from the stern and unflinching prosecution of the path of duty, which his judgment indicates and sanctions, by a retrospect of the sorry treatment experienced, in the present instance, by Mr. Best. In cases of professional failure, or mishap, the odium frequently falls upon those who have least deserved it. Yet there are in the fearless performance of our duty as professional men, however unsuccessfully the case may terminate, a conscious pride, and a consolation which he, who basely flinches in the hour of peril, can never feel, and of which the world's opinion cannot deprive us. And professional talent and intrepidity, like virtue, however obscured for awhile by obloquy or prejudice, will ultimately meet with their full reward.

In the present communication, I have had no object in view but the honour and the interests of the beneficent profession to the study and practice of which my life has been devoted. With Mr. Dickenson I am utterly unacquainted. Mr. Best I know something of: and, like all others who have that pleasure, I know him only to respect his character and his talents.

I remain, Sir,
Most obediently, yours,
MEDICO-CHIRURGUS.

Birmingham, April 24, 1846.

[1] "He (Mr. Dickenson) was sent for at a quarter after twelve; but did not arrive till nearly two." Evidence of Hannah Tudor; as given in the report of the trial, by the *Birmingham Journal*, for Saturday, March 28th, 1846.

APPARATUS FOR THE TREATMENT OF CERTAIN INJURIES OF THE SHOULDER.

(To the Editor of the Medical Times.)

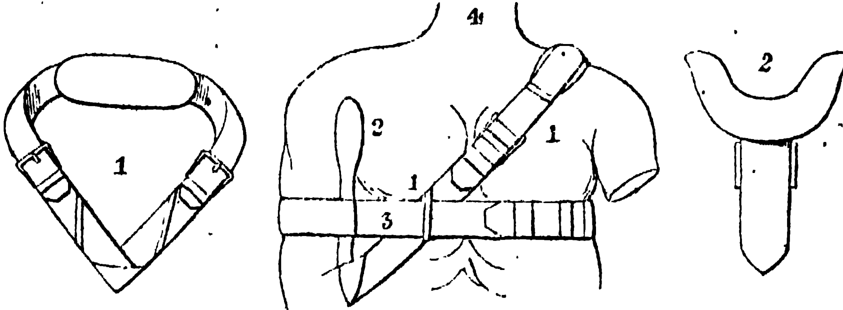
SIR,—I beg you will do me the favour to insert in one of your early numbers, a copy of the annexed diagram, and description of a simple apparatus invented by me, for the treatment of certain injuries of the shoulder. wherein it is necessary to

raise and support the arm, but, more particularly fractures of the clavicle. Having witnessed in many cases of this latter injury, the annoyance and irritation produced by the common way of treating it, by the figure of 8 bandage, as well as by the more complicated method of Desault, and other more modern contrivances, I was induced to attempt something to remedy their inconvenience, and having succeeded effectually, I now venture through your widely circulating journal to introduce the same to the notice of the profession.

I am, Sir,
Your most obedient servant,
J. Ellis, R.N., M.R.C.S.E.

1, Salisbury-street, Strand, March 10, 1846.

P.S. The article may be inspected at the makers, Mr. Blackwells, 3, Bedford-court, Covent-garden



MR. SETON'S CASE.

To the Editor of the Medical Times.

Sir,—The greater part of the *seance* at the meeting of the Medical and Chirurgical Society having been occupied by the reading of Mr. Liston's paper, and so little time having been left for discussing the important question submitted to the fellows for consideration, I did not think that the debate was to be finally closed, so as to prevent any further remarks at a subsequent meeting, and supposing the question would be again brought forward, I attended last evening, intending to make one or two additional observations in reply to those of Mr. Liston; and after the thanks of the Society had been expressed to the author of an interesting paper which was read, as no one seemed disposed to comment upon it, I reverted to the subject of discussion of the former meeting, but desisted upon the intimation of the president that more time must be allowed to see whether any remarks would be offered upon the paper which had been read. A silence of several minutes still continuing, the president proposed to pass on to the reading of another paper, when a gentleman, at length, rose to speak, who was followed by two or three others. In the meantime a member stated to me his opinion, that it was contrary to the rules of the Society to revert to the subject of a former discussion, which the president, after referring to the rules, confirmed. Being but little of a debater, I had attended but few of the meetings, but was induced to go and hear the discussion upon a case which had attracted so large a share of public attention, though not expecting to take any part in it myself, and I was somewhat surprised at the long silence that followed the reading of the paper, as I had heard that some members, who objected to the treatment, would be present; and Mr. Liston afterwards stated that he had written to several gentlemen, who he understood had criticised his practice very freely, but for some reason or other they had declined to attend. Did it not strike Mr. Liston that persons, with whom he was on terms of intimacy or acquiutanceship, might not perhaps like publicly to express their disapprobation of his practice? But, at all events, the absence of members whose position would authorise them in freely expressing an adverse opinion, could scarcely be construed into a general approval by the profession of the treatment pursued; and I was induced to submit the few observations which I made to the Society, not with the intention of imputing blame, which (not having seen the case) I should not have felt myself justified in doing, but in order that the principle which the consideration of the question involved, viz., that of tying the proximal portion of an artery of the first order, in a case of traumatic aneurism, which had existed a few days, and which, I conceived, was opposed to that laid down by the first authorities, should not go forth under the sanction of Mr. Liston's name, and those of one or two other gentlemen whose opinions have weight with the profession, and stamped with the approbation of the first medical society in the kingdom without some reference to the exceptional conditions demanding consideration, especially when the external iliac is implicated, and thus constitute a precedent for encouraging the tendency to operate, which it is the peculiar characteristic of British surgery to avoid as much as possible.

Mr. Liston observed that he "could not understand the gist of my remarks, which did not appear to him to have any direct bearing upon the case;" but I think the fellows of the Society, and those who have read the report of the debate, will consider that they did bear most directly and solely upon the practical part of the question; their purport being to object to the principle of applying a ligature to an artery, by which the supply of blood would be suddenly cut off from nearly one-fourth portion of the body, without there being any adequate means of supplying the deficiency; and this objection would, more particularly, apply to a person accustomed to free living, of a full habit of body, who was already exhausted by loss of blood, and in whom there was no recurrence of the hemorrhage, although there might be reason to apprehend such an event, which even had it occurred, would not have been necessarily irremedial without having recourse to so extreme a measure, even if the crural itself had been certainly wounded; and I think the opinions which I expressed in the Society will be found to be corroborated by the best authorities, upon similiar questions, of whom, perhaps, there is none higher than Larrey, who observes, in his *Clinique Chirurgicale*, with reference to traumatic aneurisms—"The ligature is truly the most sure and certain remedy, but only when it is applied to vessels which are removed from the principal arterial trunks. In arteries of a secondary order, where the anastomoses are more numerous and stronger, the ligature may be applied with much greater chance of success, and thus secure in a prompt and certain manner the existence of the patient and the preservation of the limb; but, on the contrary, in cases where the chief arteries, as the common carotid, subclavian, axillary, external iliac, or crural, are injured, the same rule would not apply; the ligature is not always practicable, and whatever may be the opinions of authors, it has not always the success hoped for."

This, be it observed, has reference to the cases where the principal trunks are wounded, and if it be just as regards the carotid, axillary, and crural, where there are more abundant means of carrying on the collateral circulation, how much more must not the same observation hold good in the instance of the external iliac, which gives off no branch above the epigastric, and supplies so large a portion of the body with blood.

"The anastomoses of the arterial branches, from the portion of the artery above the aneurismal tumour, with those arising below it, become less developed in proportion as the tumour is formed rapidly or suddenly, and the success of the operation is less to counted upon than when the tumour is formed slowly. It is then, doubtless, preferable, especially when the great arterial trunks are implicated, to amputate the limb. Sedatives should, however, be previously tried, and their use persisted in.

"In order to corroborate our opinion respecting the uselessness and the danger of tying the chief arterial conduits, we will relate the following cases:—

[Here follow several illustrative cases.]

"Now, if we compare the operation of tying the principal trunks with our sedative and revulsive method, we shall see, on the one hand, an operation more or less difficult of performance as regards the surgeon, and as regards the patient very painful, and of so uncertain a result, that of thirty individuals, where the subclavian, the origin of the axillary, the external iliac, or the origin of the crural arteries were tied, there are scarcely four or five cases in which the success is complete. Our method, having none of the inconveniences of the ligature, presents, on the contrary, the advantage of arresting the progress of the evil, of favouring the formation and development of new arteries, obliterating the trunks of the wounded ones by provoking adhesive inflammation in the coats of these arteries and of the surrounding parts. The effects of ice seem to us to be extended to all parts of the circulation; the arterial and venous systems becoming constricted in their diameter, and all the internal organs necessarily experience the influence of the process of constriction or atrophy.

As we have already said, when traumatic aneurisms are connected with arteries of a secondary order, as the humeral, radial, femoral, popliteal, or their branches, the ligature may be preferable to any other means, especially if the patient desires the operation, because mortification of the limb is not to be feared, and because it would be useless to subject the patient to a state of absolute repose, a rigid diet, and the application of ice, during the time requisite for the obliteration of the vessels which are the seat of the aneurism, and for the production of those which must replace them, which regimen many patients would but ill bear."

More might be said upon the question, but I fear that this letter will already take up a great deal of space in your columns.

I am Sir,
Your obedient servant,
Edwin Lee.

13, Curzon-street, April 29, 1846.

[We regret this letter should have been omitted from our last number; its omission was unintentional.—Ed.]

THE LATE MR. JOHN SCOTT.

Mr. John Scott was born in 1798, and was the only son of Mr. Scott, of Bromley, a gentleman well-known, and deservedly respected, as one of the most successful general practitioners of his day.

In the extensive field afforded by his father's practice, Mr. John Scott early imbibed a taste for the surgical branch of our profession, and probably, also, in the same school, he gained that confidence in the resources of his art, which, in after years, characterised him as a practical surgeon.

The commencement of Mr. John Scott's education was conducted at a private school, at Sevenoaks, whence he was sent to the Charter-house, where he displayed much of the spirit and energy which marked his subsequent career; and upon leaving that establishment, he was apprenticed to the late Sir Wm. Blizard, then the senior surgeon to the London Hospital.

Every advantage, which a youthful seeker after professional information could require, was now open to him, and most eagerly did he use his opportunities for gaining knowledge.

After obtaining the diplomas of the Royal College of Surgeons and the Apothecaries' Company, Mr. John Scott settled at Bromley, to share his father's lucrative practice, and he very shortly after formed

a matrimonial alliance with Miss St. John, the daughter of a church dignitary of that name.

Though most men would have esteemed themselves fortunate in possessing a part of so large practice as that of Mr. Scott, of Bromley, the restless, energetic, and ambitious mind of Mr. John Scott could only find a suitable expanse for it exercise in our great metropolis, and he accordingly soon after took up his residence in New Broad-street. Here his practice increased to a considerable amount, with a rapidity perhaps unequalled by that of any other consulting surgeon of his age. The profession, ever jealous of great success, attributed Mr. John Scott's progress entirely to the *prestige* of his father's name, while on the other hand, himself with little candour ascribed it exclusively to his own merits and energy. The truth may be found between the two extremes—his father's name procured him many excellent patients, and his high professional qualifications—his untiring zeal, and scientific and dexterous application of his father's mode of treating ulcers and diseased joints, grafted as it was upon a sound professional education, enabled him to surpass his father even on his own ground, and to take a high position both with the profession and the public.

Soon after he came to London, Mr. Scott was engaged in two very active canvasses—one for the office of assistant-surgeon to the London Hospital, and the other for an appointment to the Ophthalmic Hospital in Moorfields; in the former, though defeated by a long previous canvass on the part of his opponent in the first instance, on a second vacancy occurring soon after, he was elected without opposition; in the latter, after a very fierce contest with a senior candidate, possessing very powerful city interest, he gained the day—his triumph being on this occasion due partly to his great activity, and partly to the opinion held by the governors that he was the more talented and useful man of the two; he was also soon after this appointed lecturer surgery at the Medical School of the London Hospital.

We now see Mr. John Scott possessed of all that a young aspirant for fame and fortune could desire, attached to two of the largest hospitals in London, a public teacher, and in the enjoyment of a lucrative and rapidly increasing practice. As years rolled on, many of his most ambitious hopes were realised; he for some time possessed the largest city practice in London; he performed some of the most formidable operations in surgery with success, and obtained a high reputation as a bold and successful surgeon; but, when yet in the prime of manhood, insidious disease commenced its ravages, and though he struggled hard against it for some years, at length prevailed, when yet only in his forty-eighth year. He clung to his several appointments with a remarkable tenacity, and performed their labours, when disease and weakness rendered such efforts painful to himself and others, and only resigned them one by one, when his prolonged absence from their duties rendered his resignation almost imperative.

We shall now proceed to take a brief survey of Mr. John Scott's character as a surgeon, a teacher, an author, and a man.

As a surgeon he was distinguished by remarkable rapidity in diagnosis, and much decision and energy in treatment; having once formed an opinion, he never wavered in the plan to be pursued or allowed his feelings for the patient to modify in the least degree the severest treatment his judgment dictated. A case seldom lingered under his hands; though it must be owned that, when he failed to ameliorate, he often aggravated the condition of his patient. As an operator he was bold but not cool, and rapid without being dexterous He aimed too much at a "*coup de main*," and sometimes used force when manœuvre would have succeeded. He was, we believe, the first in England to perform the bold operation of removing the superior maxillary bone for disease of the antrum, this he did successfully, though discouraged by his senior colleagues. As a public lecturer he was verbose, and had much mannerism. As a clinical instructor he was far more successful; and he commented with much clearness and spirit upon his cases, and explained very graphically the principles upon which he acted. He was the first to set forth and exhibit to the profession, both theoretically and practically, the immense advantage to be derived from mechanical support in every variety of chronic disease; and he was the best applier of strapping and bandaging in England, both as regards rapidity and perfect adaptation of the amount of pressure suitable for the particular case —a skill which is only to be acquired by long experience and careful observation; for his exposition of this, the profession owe him a deep debt of gratitude, which they will be the more willing to pay as they learn experimentally the value of the plan he was the first publicly to inculcate, both in his work on the Diseases of the Joints and in his lectures. As an author he could not, however, expect to be very successful, being neither an extensive reader, a close reasoner, nor a deep thinker.

In his private character he was justly respected as a man of honour and strict integrity; but his uncertain and irritable temper, aggravated, perhaps, latterly by disease, rendered his manner to his patients, and even to his friends, repulsive and overbearing, though when he was pleased few could be more agreeable; he always seemed fond of children, and deeply regretted his having no family. With his colleagues he was always in a condition of antagonism, or of assumed superiority—there was no alternative between submission and opposition. His principal pleasure was derived from some triumph over another, regardless of wounded feelings. General practitioners rarely, if ever, called him in a second time. Enemies, as may be imagined, he had many; of private friends a very limited number, and from this it may be readily conceived that, notwithstanding his possession of every outward means of happiness, that subtle thing eluded his grasp; externally there was triumphant success, internally there was irritability, restlessness, and dissatisfaction. He had no sympathy with humanity, and consequently a fruitful source of h[illegible]ness was never open to him.

In person Mr. Scott was tall, thin, and active, and his sharp rigid features and quick grey eye were to an acute observer an exact index of the mind within.

Mr. John Scott has left a widow, a father, and a sister to mourn his loss; the latter is the mother of a large family

Report says that he has died rich, and, after leaving a jointure to his widow, has bequeathed the bulk of his property to charities, entirely omitting those by which he rose to affluence, and chiefly selecting those of an evangelical order.

GOSSIP OF THE WEEK.

Mr. Dermott.—Our readers have been apprised that this eminent and successful lecturer on anatomy and surgery (for a considerable time the pupil and assistant of Brookes) was excluded from the fellowship by his brother teachers occupying seats in the Council of the College of Surgeons. By an odd turn in affairs it has been the fate of this gentleman to complete the education of many of the surgeons who have since passed the college examination as fellows. His marvellous power of imparting in a short time practical scientific information has given "Fellows" to the college which declined to allow him the distinction he is thus the cause of to so many others.

Apothecaries' Hall.—Gentlemen admitted Licentiates on the 7th of May, 1846.—Richard Sandford, Edward Lowdell, George Johnston Langsford, John Rome, John Griffith Morris, William Burns Beatsan, William Frederick Cleveland.

Royal College of Surgeons.—The following Gentlemen were admitted Members of this College, on Friday, May 8th, 1846:—viz, Messrs. J. Ward, J. D. Blake, C. C. Hailey, F. Sibery, E. C. Thorp, D. Evans, R. R. Crucefix, N. J. Hobart, R. Allen, F. C. Jones, J. Syme, and J. S. Smith.

Mr. Field has been elected house-surgeon to the Royal Sea-bathing Infirmary, Margate.

His Majesty the King of the French has been pleased to confer the decoration of the Legion of Honour on Dr. Ollille, a distinction seldom granted to foreigners residing in France.

Charing-cross Hospital Medical School, West Strand, London.—The annual distribution of prizes and testimonials of honour to the students most distinguished for their acquirements in the various branches of medical study at this institution, took place on Wednesday the 6th of May, 1846, the Rev. G. H. Bowers, B.D., in the Chair. The following gentlemen were the successful competitors:—Chemistry: Silver medal, Mr. Thomas Sutton Ludlow, Hanworth; a book, Mr. George W. Paternoster, Lambeth. Materia Medica: Silver medal, Mr. George W. Paternoster; first honorary certificate, Mr. Robert Hamilton, Ipswich; second honorary certificate, Mr. F. W. A. Rawlins, London. Anatomy (Senior class): Silver medal, Mr. Henry Lambden, London; (Junior class) bronze medal, Mr. George W. Paternoster; certificate, Mr. Robt. Hamilton. Midwifery (Senior class): Silver medal, Mr. George B. Payne, Manchester; certificate, Mr. Henry Watts, London; (Junior class) bronze medal, Mr. Henry Lambden, London; certificate, Mr. C. R. Durell, Jersey. Physiology (Senior class): Silver medal, Mr. Henry Lambden; (Junior class) bronze medal, Mr. George M. Young, Bucks. Medicine (Senior class): Silver medal, Mr. Joseph Fayrer, Bermuda; certificate, Mr. John W. B. Steggall, London; (Junior class) bronze medal, Mr. C. R. Durell. Surgery (Senior class): Silver medal, Mr. Joseph Fayrer; a book, Mr. J. W. B. Steggall; (Junior class) bronze medal, Mr. C. R. Durell. Botany: Silver medal, Mr. C. R. Durell; certificate, Mr. Joseph Fayrer. Medical Jurisprudence: Silver medal, Mr. J. W. B. Steggall; a book, Mr. Joseph Fayrer. Governors' Clinical Prize: Silver medal, Mr. W. Cox, Wales. General Proficiency: The gold medal, Mr. Henry Watts, London. Diligence and good conduct (honorary testimonials): Mr. Jago; Mr. John Lynch, Shadwell; Mr. R. Westley, London; Mr. Stillman, Shropshire.

In consequence of the repeated attacks on the Dr. Moizin, member of the superior council of health, has been created knight-commander, and Drs. Long, Bravet, Chassinat, Hubert, Hutin, Cagnon, Briard, Jousserandot, Billardet, and Bernard, knights, of the legion of honour. Dr. Lutens, an army-surgeon, has been created a knight of the order of Leopold in Belgium. If an order of merit were created for civil services in Great Britain, many members of our profession would be found entitled to receive its honours. "They manage these things better in France."

Obituary.—Recently M. Mabit, sen., director of the school of medicine at Bourdeaux, and honorary physician of the Hôpital Saint André.

MORTALITY TABLE,

For the week ending May 9, 1846.

Causes of Death	Total.	Average of 5 summers	Average of 5 years
All Causes	811	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	130	162	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	86	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	142	155	157
Diseases of the Lungs, and of the other Organs of Respiration	279	271	294
Diseases of the Heart and Blood-vessels	27	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion	72	65	72
Diseases of the Kidneys, &c.	11	7	7
Childbirth, Diseases of the Uterus, &c.	15	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	18	6	7
Diseases of the Skin, Cellular Tissues, &c.	2	1	2
Old Age	39	60	67
Violence, Privation, Cold, and Intemperance	16	25	26

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of 11th May, 1846; M. ELIE DE BEAUMONT in the Chair.

DISTRIBUTION OF PRIZES.

Astronomy.—The prize (a gold medal, value £25) was divided between M. de Vico, director of the observatory of the Roman College, and M. Darrest, attached to the Observatory of Berlin. Each of these astronomers discovered a comet during the year 1814

Statistics.—M. Chalette, for his statistics of the Département de la Marne.

Experimental Physiology.—(gold medal, value £35)—M. Agassiz received the prize for his work on living and fossil fishes; another prize was awarded to M. Bishoff for his treatise of the development of the ovum and of the fœtus of the dog. M. Raciborski was also distinguished by the commission as having extended to the human race the researches of M. Pouchet relative to the spontaneous ovulation of mammiferæ.

Improvement of Insalubrious Arts (£80).—M. Chaussenot received this prize as a recompense for the invention of an apparatus destined to diminish the chances of explosion in steam-generators.

Medicine and Surgery.—The first prize (£60) was awarded to M Amussat for his researches on the wounds of the vascular system. This is the fifth prize awarded to the learned surgeon by the Institute, his researches on lithotrity, the torsion of arteries, the introduction of air into the veins, and lumbar enterotomy, having been all judged by the Academy deserving of recompense. M. Milne Edwards, the reporter of the commission, in proposing M. Amussat for the first prize, observed that, although many surgeons, both ancient and modern, had already turned their attention to the study of the difficult question of vascular lesions, M. Amussat found something more to glean in the field of observation, and had arrived at conclusions interesting, not only to physiology, but to operative surgery. His experiments have been chiefly performed upon sheep and oxen slaughtered according to the regulations of the Jewish religion, and permitted him to study with accuracy the local phenomena consequent upon complete section of arteries in a broad transversal wound. He has shown that hemorrhage is spontaneously arrested, not by contraction of the artery, but by the formation of a clot, forming at first, not a plug, as it has been asserted, but a ring, which becomes, by the deposition of fibrine, gradually narrower, until the orifice is entirely closed A second clot, independent of the first, forms within the vessel, and the hemorrhage is stopped. M. Amussat has given the signs by which the orifices of vessels, obliterated in a temporary manner by such clots, are to be recognised on the surface of a wound, in order that a ligature being placed on them, secondary hemorrhage may be prevented M. Amussat also gives most interesting details on the formation of hematic tumours under the skin, on the cicatrisation of veins and arteries, and on the production of traumatic aneurism.

A second prize (value £50) was granted to Dr. Bonnet, of Lyons, as a reward for his researches on diseased joints. The novelty of Dr Bonnet's views, and the method of experimental inquiry, which the author has followed, recommend, said the learned reporter, this work to the encouragement of the Academy. In order to ascertain the better certain mechanical effects of hydrarthrosis, M. Bonnet made experiments on the dead body by forcing injections into the articular cavities, and recognised with certainty the position which the limbs must acquire under the influence of this sort of dropsy, the new connections of the articular surfaces with each other, and the road followed by the extravasated liquids when the capsule is distended beyond the limits of its elasticity. The commission also noticed M. Bonnet's researches on articular fungus, and his remarks on the cure of hydrarthrosis by the iodine injection.

A prize of £25 was awarded to Drs. Becquerel and Rodier as an encouragement for their researches on the composition of the blood in health and in disease. To M. Réveillé Parise £20, for his remarks on the dressing of wounds with thin plates of lead; to M. Morel £20, for his memoir on dislocations of the clavicle, and to M. Clias the same sum, for his new method of gymnastics.

The meeting adjourned after the panegyric of the mathematician, G. Monge, was pronounced by M. Arago.

ACADEMY OF MEDICINE.

Meeting of May 12th, 1846; Dr. ROCHE in the Chair.

CASE OF PELLAGRA.—M. Honori read the case of a patient whom he supposed to be affected with pellagra M. Emery remarked that the symptoms assigned to that disease did not appear to have been present in the case related by M. Honori, which might more properly be attributed to softening of the spinal cord. When the case has been further investigated we will forward an account of it to the *Medical Times*.

DISEASES INCIDENTAL TO THE CLIMATE OF ALGERIA; BY C. BROUSSAIS, M.D.—Disease is more common in Algeria than in France; 50,000 men giving a yearly average of 60,000 patients, the same men being several times in the year admitted into hospital. The mortality is also greater, the army losing 8½ per cent. in a twelvemonth, and only 2½ per cent. in France. The mortality has, however, much decreased since the occupation, having fallen in 1843 to 6 per cent. In this respect the French colony enjoys an advantage over the British possessions, where the average of disease is equal to double the number of effective men; the mortality being equal to 10 per cent. February, March, and April are the most healthy months, in June epidemics begin to prevail; in July the number of patients suddenly increases, and is double that observed in June In August it attains its maximum, and afterwards decreases to the end of the year. The average of deaths is greater in December than in any other month. In Algeria acute disorders and pernicious fevers are not the most fatal, the greatest number of deaths being clearly due to chronic maladies. Few men escape the morbific influence of the climate; of 100 men admitted into the hospital, 6 only have been affected with sporadic diseases, 20 with intermittent fever, 20 with diarrhœa or dysentery, and 54 intermittent fever, diarrhœa, or dysentery. Diarrhœa is the most common of all, and few men escape from it. M. C. Broussais describes in the same chapter diarrhœa and dysentery—two affections united by the closest ties—caused by the same pathogenic influences—appearing at the same seasons—passing readily into each other—producing the same anatomical changes—and curable by the same methods of treatment. It is in June they are observed to increase, their frequency being observed to augment up to September, when acute is gradually replaced by chronic enteritis. After describing the morbid changes induced in the structure of the large intestine by dysentery, M. Broussais proceeded to say that he had derived benefit in its treatment chiefly from narcotics, assisted with antiphlogistic measures, purgatives proving advantageous only in mild cases. He lost no case of diarrhœa, and 2 only of 85 patients affected with dysentery; on the contrary, the mortality in chronic colitis had been very considerable. In dysentery the analysis of the blood has demonstrated the presence of no other change than the increase of its fibrine in some cases. Although dysentery is evidently, in M. Broussais' opinion, an inflammatory disease, still it is under the control of epidemic influences which must be taken into great account, and are, sometimes of so malignant a nature as to cause, at some seasons, the best directed methods of treatment to prove unsuccessful. As to intermittent and remittent fevers, they become epidemic during the hot months. In August, 1845, and in September, the patients afflicted with these maladies were four times more numerous than at any other time of the year, 396 cases of common ague fell under M. Broussais' personal observation; all did well under the influence of a regular diet, cold enemata, and sulphate of quinine in moderate doses. No deaths occurred amongst the 111 instances of remittent fever admitted into M. Broussais' wards. In all these, even when the symptoms appeared most clearly of a continuous character, intermittent phenomena could be discerned. The consideration of these two orders of fever led the essayist to speak of pernicious fevers, of which he observed 24, and lost 3; 16 of these 24 patients presented cerebral manifestations (coma, epilepsy, delirium), 4 suffered from cardialgia, 1 from hemorrhage, 1 from pneumonia, 1 from cholerie, and 1 from algid symptoms. Besides venesection, which was occasionally indicated, the sulphate of quinine appears to have been always necessary, in doses varying from a scruple to a drachm daily. M. Broussais had often seen these fevers caused by mere heat, miasmatic emanations

having nothing to do with their production. M. Broussais closed his paper with some remarks on pulmonary consumption. In 930 patients he met with, there were only 8 in whom tubercles were recognised during life; 2 of these died, 2 left the country with slender chances of amendment, and seemed to be completely cured.

ANATOMICAL CHANGES IN THE BRAIN, ACCOMPANYING THE GENERAL PARALYSIS OF THE INSANE.—Dr. Belhomme presented to the Academy two brains, one belonging to a man aged fifty-five, who died from the progress of double pleurisy, but who was affected with general paralysis. The other brain was that of a man who died of epilepsy, and who was affected with the same loss of power as the first over the muscles of locomotion. In both the grey substance was softened, also the corpus callosum, the fornix, the ventricular organs, the crura cerebri, and the cerebellum. Dr. Belhomme closed his communication with the following remarks:—The general paralysis of the insane is consequent upon softening of the cerebral substance, and this anatomical change is not only accompanied with paralysis of the voluntary muscles, but with more or less evident intellectual derangement. In seventeen cases of general paralysis, Dr. Belhomme had found the membranes always injected and adherent to the brain fourteen times. Fourteen times out of seventeen had he met with softening of the cineritious matter, and twelve times of the medullary substance. The corpus callosum and fornix were softened fourteen times; the tubercula quadrigemina thirteen times; the pons varolii and crura softened six times, and indurated in three cases; the walls of the fourth ventricle softened fourteen times, hardened three; the cerebellum and bulb softened in six patients, and the bulb indurated in three.

HOSPITAL NECKER.

[Concluded from p. 118.]

CLINICAL LECTURE. DIARRHŒA OF CHILDREN. BY PROFESSOR TROUSSEAU.

Treatment.—We have said that lientery consists in the passage of indigested food with the motions; perhaps the microscope would prove that this condition is more frequent than is generally supposed. However this may be, the little patient grows thinner, but without the presence of febrile excitement. Under such circumstances the conduct of the practitioner is exceedingly difficult, because, in the first place, the disease may be connected with an inflammation of the intestines, producing a morbid exaggeration of the peristaltic contractions, and because, in the second, we may have to cope only with a perversion of functions induced by debility; thus the symptoms may result from two very opposite conditions of the system, difficult to distinguish from each other, and each indicating a contrary line of treatment. Let us add also that it not unfrequently occurs in consequence of the derangement of some other viscus, that the intestines become inapt to accomplish their functions, and become inflamed secondarily from the presence of irritating matter on their mucous surface. Thus the duodenum, bears, without morbid excitement, the passage of chyme, but inflames when unaltered food is forced into it by the stomach. Thus also enteritis and colitis may result from lientery, originating at first in weakness. Contrary to what is observed during health, the motions of lienteric subjects are acid—a circumstance which may perhaps account for the salutary influence of alkaline medicines, by which the biliary and pancreatic secretions may be, to a certain extent, replaced. I have found three substances of this nature, particularly beneficial, these are;—Magnesia, in small doses, from one to five grains daily; lime water, one scruple to one drachm; and the bicarbonate of soda, two to eight grains.

The change in the composition of the blood, occasionally a primary, but more frequently a secondary alteration, must be remedied by appropriate means. The most efficient of all medicines for this purpose is, in my opinion, common salt, in doses varying from five grains to one drachm daily; be cautious, however, Gentlemen, how you prescribe this substance in private practice. The absurdity of the public in these matters is such that the pre-contempt; but if you order the mineral waters of Hombourg, Kissingen, or Niederbrunnen, in which the salt is really the active element, the therapeutic action will be exactly the same, and you will preserve the confidence of your patients, which a more candid prescription would most probably have deprived you of. Mineral baths, containing from two to six ounces of sulphate of iron, sulphureous or aromatic baths, with decoctions of sage, lavender, and rosemary, a pint of red wine and common salt, you will also find very effective. Above all. let the child enjoy the benefit of good air, and let him be taken into the sun. The food most appropriate to infancy is milk, a small quantity of which must be taken. Should colitis be present, it will be removed by enemata, containing a few grains of sulphate of zinc or nitrate of silver, and to remove pain, a half a drop of laudanum will suffice.

Treatment of Mucous Diarrhœa.—When the motions of the infant contain a certain quantity of glairy matter, inflammation of the intestinal mucous coating may be pronounced to exist. If the motions are greenish, and contain curdled milk, the small intestines are concerned; on the contrary, colitis will be recognised by pain during defecation by the yellow colour of the stools, occasionally tinged with blood. In these forms of diarrhœa, ipecacuanha can be exhibited once or twice with confidence, and should be followed up with saline purgatives—sulphate of soda, for instance, one to three drachms, or the double tartrate of potass and soda. In severe cases, the medicines should be continued two days in succession; if colitis accompany diarrhœa, it is necessary to act locally upon the large intestine, and this we do effectually by the injection of medicated enemata—an injection containing one or two grains of nitrate of silver to eight ounces of liquid, and ten ounces for a child over two years, should be used. A smaller quantity of fluid should not be placed in contact with the surface of the colon; and in order to ensure the proper action of the injection, the intestine should first be cleared out with a lavement of common water. But the solution will not penetrate, or will be rejected on account of the cries or efforts of the infant, unless peculiar precautions be taken; a caoutchouc tube, long enough to penetrate beyond the sphincter ani, should be adapted to the syringe, and the nates should be tightly compressed with the hand; these details may appear futile, but you will find them of great practical importance; and they should not be treated with disdain, because on these, apparently, unimportant precautions may rest the cure or loss of your patient. In mild cases, one injection a-day, for three or four days, will be sufficient; in severe cases it should be repeated twice in twenty-four hours. Sulphate of zinc or of copper, the ammonide of copper, may be also used with success; but the nitrate of silver is more generally useful. Should colic and tenesmus, indicative of colitis, or colic with borborygmi, symptomatic of enteritis, be present, half a drop of laudanum given in the drink, in the second case, or two drops injected into the rectum, in the first, should be exhibited, in order to remove pain. When the disease has lasted some days, astringents may be prescribed with advantage. We place most confidence in the extracts of monœsia, two to four grains in a mixture; or of rattany, five to eight grains.

Treatment of Choleriform Diarrhœa.—The indications of treatment are here very much the same as in the cold stage of Asiatic cholera, and the efforts of the physician should be employed rather to modify the deeply affected nervous system, than to suppress the increased intestinal secretions. Revulsion must be established on the skin by rubefacient applications, and at the same time the circulation should be roused by the exhibition of internal stimulants. Mustard poultices should be applied to all parts of the body, in succession; mustard meal should be placed between two cloths, and left only ten minutes in contact with each region. The sinapisms should be continued until a proper degree of heat has been restored to the surface. Internally the use of ammonia, as a stimulant, is not generally followed with success; the evident state of alteration of the blood in this form of disease leads us to prescribe the use of alkalies, the defibrinating influence of which is a fact admitted by every one. Alcoholic stimuli are better suited to the treatment, but ether, and the distilled waters obtained from the various families of the labiatæ, chiefly mint, and melissa (balm), are remarkably useful, probably in virtue of the quantity of camphor and essential oil they contain. The infant should take a teaspoonful of the distilled water every half hour at least, until the skin warms, the breath acquires a natural temperature, and the pulse is perceptible. This being obtained, the nervous system has been called into action, and should be left undisturbed to re-establish the equilibrium.

Ipecacuanha, both as a diaphoretic and a substitutive, is also useful, but should not be given before the reaction has fairly set in. When, by this treatment, the progress of the disorder has been checked, the disease returns to one of the other forms of enteritis, the treatment of which we have already described. Even in choleriform diarrhœa, infants should not be kept in a state of complete abstinence; they should be fed with milk and water, containing occasionally the subnitrate of bismuth, prepared chalk, or the carbonate of lime; water containing fecula, with a little egg-flip, is also a convenient article of food, and if the child rejects it at first, he will afterwards keep it down, if an extremely small quantity of laudanum be added, as a sort of "passport" to the pylorus.

The *prognosis* of the various forms of diarrhœa we have enumerated, is extremely serious for the very young infant and for the recently weaned child, but is less so when the child is still at the breast. You must not, therefore, deprive your little patient of his nurse, although pure milk may be too solid food for his deranged stomach, because it is not impossible to change its qualities. Observe the nature of the lacteal secretion in a healthy nurse. When the breast is pressed with the hand, an opaline, semitransparent fluid issues, containing few, if any, butyraceous particles; but when the child has sucked for three or four minutes, the milk rises, according the popular expression, i. e., a peculiar sensation is experienced by the nurse, and a spontaneous and abundant secretion of fatty matter takes place; the milk is then perfect, white, opaque, and highly nutritious. Allow the child to take the breast only for three or four minutes, therefore, until the milk rises, and you give him a light food, well-appropriated to his sickly condition.

If the infant has been recently weaned, his nurse should be given to him again. Some children will take the breast after having been deprived of it for six weeks; but almost all will resume it if they have been weaned only a week. If the same nurse cannot be procured, another should be tried, and the child should be given to her in the dark, because he would probably refuse the breast were he not to recognise his own nurse. At any rate, the drinks should not be given with spoon or cup; the little patient would soon refuse any more troublesome method of assuaging thirst; but he should be made to suck his drink from a twisted rag; and his drink should be made less sweet and palatable than the nurse's milk, to which he will soon, with these precautions, return with pleasure.

HOTEL DIEU.

CLINICAL LECTURE.—INTESTINAL OBSTRUCTIONS. BY PROFESSOR CHOMEL.

(Continued from page 90.)

In some instances, the progress of the contents of the digestive organs may be arrested by the presence of foreign bodies:—Thus, fruit-stones, large pieces of food, or hardened stercoraceous accumulations, have been observed to obliterate the pylorus or other parts of the intestines. In all cases of obstruction, the seat of the disease, and its nature, should first be ascertained. The vagina should be examined in females, and in both sexes the rectum should be carefully explored, in order to detect, if possible, the strangulation or obstructed portion of intestine. When the foreign body is placed on the ileo-cœcal valve, in such a manner as to interfere with its play, the symptoms have not the acute characters of common strangulation. A chronic form of obstruction is likewise produced by the development in the abdomen of tumours foreign

the intestine in their anatomical seat, but pressing upon it so as to obliterate partially its cavity. It is only of acute occlusions we intend to speak in these lectures. In these the digestive organs are found dilated above, and straightened below the obstacle, and in almost every case the morbid changes due to secondary peritonitis are observed in the vicinity of the obstruction. Occasionally the intestine is found lacerated, and issue of fæcal matter has taken place into the serous sac. It is very uncommon to find that death has been the consequence of the obstruction, without any trace ... to the peritoneum.

At the outset of the malady, no initial chill is observed. The scene opens with very acute and well-circumscribed pain, in a limited region of the abdomen. The belly becomes distended, and the leading symptoms of strangulated hernia—incessant vomiting and constipation, make their appearance. The pulse becomes frequent, and, if relief be not obtained, hiccup, the forerunner of death, is observed. The matter returned by vomiting consists at first of undigested food, soon after contains bile, shortly acquiring a sickening smell, which gradually becomes more and more analogous to that of stercoraceous matter. The constipation is not complete at first; the fæces contained in the large intestine are usually evacuated at the beginning, and it is necessary to ascertain the nature of the rejected matter before a favourable prognosis be drawn from the presence of a motion; thus, if obstruction be suspected to exist at the ileo-cæcal valve, and solid matter be evacuated, the most serious apprehensions are still justified; whereas, if a liquid stool follow a purgative, it is extremely probable that the matter has been passed from the small intestines, and that the obstruction is overcome. Gaseous products are for the most part secreted in the ileum, and after a few hours' obstruction, none are passed from the rectum; they are discharged by eructations.

The abdominal distension is not uniform; the protrusion of inflated convolutions under the walls of the belly give it an irregular shape, frequently modified by a sort of creeping movement due to successive contraction of various portions of the intestine. In some cases direct exploration of the abdomen may lead to the detection of a tumour in the precise seat of the violent pain by which the other symptoms were ushered in—a valuable diagnostic indication. The violence of the sufferings, as well as the extent of the pain, increase gradually by the production of peritonitis. The vomiting now takes place without straining, and, as it were, by a sort of regurgitation. A fatal termination is seldom delayed beyond the eighth or tenth day, but death does not inevitably close the scene, a spontaneous reduction being, in some few instances, observed in cases of internal, as well as in external, strangulation. Thus it sometimes happens that an accumulation of fæcal matter, producing obstruction, is forced away, or that the invaginated gut is liberated by gangrene, and rejected with the stools. An abscess causing obstruction by pressure on the digestive tube has been observed to burst—a favourable event, which has been followed by a cessation of the symptoms; but such examples are of too rare occurrence to justify any sanguine hopes in cases of intestinal occlusion. The diagnosis of obstruction is not in general attended with much difficulty; the disease may, however, be simulated, and hernia, when the incarcerated portion of intestine is very small, has been occasionally the cause of unavoidable error.

DAN. M'CARTHY, D.M P.

America.

SUDDEN ENLARGEMENT OF THE THYROID GLAND.—Dr. Palmer, in the *American Journal of the Medical Sciences*, describes the case of an old lady, a nun of the convent of the Sacred Heart, long subject to bronchocele, and to whom he was suddenly summoned. On his arrival he found her extended on a couch, with her shoulders elevated, and her head reclining backwards; the countenance anxious and pallid, and respiration apparently hurried. There was an enormous tumour over the region of the thyroid gland, extending out in front of the trachea, and which was reported by the lady abbess to have formed in a minute. It was at first tense and elevated; the patient complained of constant pain about the ears and back part of the head, for the sterno mastoid muscles were forced outwardly, and put violently on the stretch by the pressure of the tumour. On the second day its base began to spread laterally; it became softer, and in a few days more began spontaneously to diminish, and has since resumed the appearance of a very inconsiderable goitre. The vertical circumference of the tumour was three inches and a-half; the lateral circumference from one edge of the base of the tumour to that of the opposite edge five inches and one line. Dr. Palmer attributes the sudden increase in size of the thyroid gland in this case to the rupture of one of the thyroid arteries; most probably, however, a branch only of those arteries was ruptured; the hemorrhage would hardly have ceased so soon, and its effects became so speedily removed, had a vessel of such size as the thyroid, been pouring out blood into the parenchyma of the gland.

STATISTICS OF LOWER CANADA.—In Lower Canada there are 725 deaf and dumb; of these 447 are males, and 278 females; there are 523 blind; of these 273 are males, and 250 females; of idiots there are 950; of these 478 are males, and 472 females; of lunatics there are 308; of these 156 are males, and 152 females.

DISPUTED PERSONAL IDENTITY.—A report of a trial respecting disputed personal identity, published in the *American Journal of the Medical Sciences*, reveals an extraordinary practice in the slave states, and one which should be generally known. The plaintiff in this case, Salomé Muller, sued for her liberty before the courts of Louisiana, and her plea was that she was unlawfully kept in slavery; that she was a free woman of German parentage; that she left Germany with her parents, when about three years old, in an emigrant ship, which arrived at the port of New Orleans in the year 1818; that her mother died on the Atlantic passage; that her father died of the fever of the country a few weeks after their arrival; and that then, before she attained a consciousness of her rights, she was reduced to slavery, and from that time until the institution of the suit, had been treated, kept, and sold as a slave. Her master, Lewis Belmonti, in answer, merely put in a copy of the act of sale from John F. Miller to himself, and Miller, on being called on, denied that Salomé was white and free, and alleged her to be of African descent, and rightfully a slave. He denied that he purchased the service of her father and his children, as redemptioners, and averred that he received her as a mulatress slave in 1822, when she was twelve years old, from a man named Anthony Williams. The latter could not be found. It appeared in testimony, that a large number of Germans (1800) emigrated from Alsace to the United States. They were defrauded by the person with whom they contracted for their passage, suffered much in Holland, were nearly starved on board ship, and finally, after a great mortality among them, the survivors landed at the Balise in March, 1818. In Louisiana they were subjected to the redemption laws, sold for their passage, and scattered over the country, although a number remained in New Orleans. The mother of Salomé and an infant son died on the passage. The father, a son and two daughters, survived. A brother of the father, and a sister and cousin of his wife, with their families, were also among the emigrants. Daniel Muller, the father, and his children were carried by their purchaser to the parish of Attakapas, one hundred miles above New Orleans. His brother and family were taken to Mississippi, and the others of his relatives remained in New Orleans. In a few weeks the last heard that Daniel Muller had died of the fever of the country, and that the boy was drowned in the river. They immediately sent for the two girls, but could gain no information concerning them, and nothing was known of Salomé (1818 to 1843) until this time, and nothing is yet known of the other daughter. In the summer of 1843, one Madame Karl, a fellow emigrant in 1818, happened to be in a part of New Orleans but little frequented by any but the Spanish population, and passing the cabaret of Belmonti, looked in and there saw Salomé performing some menial service. She was so instantly attracted by her peculiar features, and their strong resemblance to those of her friends and fellow-passengers, the Mullers, that she entered the shop and began to question the young woman. In reply, the plaintiff told her she was a slave, belonging to Belmonti, and purchased from Miller. When told by Madame Karl that she was a white woman, she gave no credit to the story. Madame —, however, insisted on taking her to those whom she declared were her German relatives. She carr— her to the house of her cousin and god-mother, Mrs. Schubert, who instantly and without any previous intimation of the discovery exclaimed, "My God, here is the long-lost Salomé Muller!" As many of the German emigrants of 1818 as had any recollection of the lost girl were collected, and immediately identified her. Among the witnesses was the midwife who assisted at her birth, and who took Mrs. Schubert apart, and asked her if she recollected two very peculiar marks on the child, resembling moles, and about the size of coffee grains, upon the inner part of each thigh. Mrs. Schubert distinctly remembered these; since, on the Atlantic passage, after the mother's death, the care of the child devolved upon her, and she dressed and undressed it for months. The plaintiff was then called in, and, on examination, these marks were found. On the trial also, surgeons appointed by the court made an examination, and found them, and testified they were nævi materni, congenital, and could not have been artificially produced. As to the appearance of the plaintiff, she had no traces of African descent in her features. She had long, straight black hair, hazel eyes, thin lips, and a Roman nose. The complexion of her face and neck was as dark as that of the darkest brunette. The witnesses testified that both her parents were of very dark complexion. Salomé had been exposed, for many years of her servitude, to the sun's rays, with head and neck unsheltered, as is the custom of the female slaves. But it was proved that the parts of her person which had been sheltered from the sun were comparatively white. The broker who conducted the negotiation for the sale from Miller to Belmonti in 1838, swore that he then thought, and it always had been his opinion, that the plaintiff was white. Two or three witnesses, an old Creole woman who for many years had lived in the immediate vicinity of Miller's residence, and men who were in his employment in 1823, 1824, and 1825, identified the plaintiff, with the greatest certainty, as the same person whom they had often seen, at that time, in Miller's possession; that she was then a little girl, who spoke the English language very imperfectly, and with a German accent, and that they were told by Miller, or some of his household, that she was an orphan girl who came from a ship, and was taken by Miller from charity. For the defence in the lower courts, there was urged the improbability of the plaintiff's story—the numerous cases on record, where hundreds have testified to a person's identity, and yet it has proved otherwise; the peculiarly excitable and imaginative character of the German and the proved character of Miller for kindness to his slaves. Several persons spoke of seeing the plaintiff in Miller's possession in 1824—25, living as a slave, and perceived no German accent in her speech. Their opportunities for conversation had, however, been very limited. The main point of defence, however, was derived from the testimony as to ages and dates. The petition averred that Salomé was three years old in 1818. The defence brought forward a witness who swore that the plaintiff was delivered of her first child in 1825. It was, however, subsequently proved that the child was born in 1829 or 1830. The court decided in favour of the defendant, on the ground that he could not divest a citizen of his property, upon such testimony of identity as that offered by the plaintiff—although he admits that the resemblance to the Muller family and the congenital marks, were a very remarkable coincidence, and further said he was satisfied, from the evidence of the plaintiff's delivery in 1825, that she was not the lost Salomé. An appeal was made to the Supreme Court of Louisiana, and the case came up in May, 1845. In the meanwhile, the Consul for New Orleans from Baden-Baden had visited Europe, and brought back with him a certified copy of the registry of birth, from which it appeared that Salomé was born on the 10th of July, 1831, and therefore,

in 1818, was five years old and not three. The cause was argued by numerous counsel, and on the 21st of June, the court decided that they were fully satisfied that the plaintiff was "Salomé Muller," and if not so, if there was another person, of the same age, with the same peculiar marks, and bearing so strong a family resemblance, "it would be one of the most wonderful facts in history." She was therefore declared free. *** It thus appears from this very remarkable trial, that despite the accumulated evidence poured in on all hands, in addition to the physical evidence offered by the presence of the nævi materni, and the undoubted proof that the plaintiff was a white woman, and neither a mulattress nor a negress, the lower court of Louisiana, in its tender regard for the sacredness of property in human beings, could decide in favour of the defendant notwithstanding the great discrepancy in the evidence as to dates, it being proved that the dates furnished by the defendant's witnesses were altogether incorrect. An additional fact connected with the case, and one which it is necessary should be generally known, is that persons going to the slave states in America, unless fully able to pay all their travelling and other expences, are liable to be sold into slavery as redemptioners, and then may be so transferred from one dealer in human flesh to another, as to lose all chance or prospect of obtaining such a chain of evidence as would establish their claim to freedom.

TURPETH MINERAL.—Dr. Hubbard of Hallowell, Maine, in the Transactions of the Philadelphia College of Physicians, records his experience with the turpeth mineral, the sub-sulphate of mercury, as a safe, and certain emetic, unpossessed of cathartic action. He has found it, he says, of great advantage in croup, especially in the spasmodic and intermittent forms, and in scarlatina maligna. In commenting on the peculiarity of this substance as an emetic, and in answering some of the objections urged against it, Dr. Hubbard remarks that in the first place the promptness and certainty of its operation belong to no other substance that he is acquainted with. It has seldom, if ever, failed to vomit efficiently, when administered in a proper dose, in any of the various conditions of the stomach, and of the system, in which he has given it. It usually acts in ten or fifteen minutes, and the dose should be repeated at those intervals, if the first fail, which rarely happens. In efficiency and revellent power, it is not, perhaps, quite equal to the tartarised antimony; it is, however, vastly superior, in these respects, to ipecacuanha, or any other substance. In safety, it is greatly superior to antimony. Its emetic operation usually continues from an hour to an hour and a half, not accompanied nor followed by any of the distressing nausea, prostration, and depletion, of antimony; but, on the contrary, leaving the patient with the invigorated feeling arising from equalised warmth and circulation In its emetic operation, it has seldom, never in his recollection, been accompanied or followed by catharsis. He has never known it to be violent, nor otherwise than entirely safe in its operation, although he has given it in much larger doses than are usually directed; nor has he ever seen salivation follow its use as an emetic. So safe does he consider it, that in urgent cases he has not hesitated to put his patient under its full emetic operation, two or three times within twenty-four hours; nor has he seen ill consequences result from such practice. He thinks that the dose should be somewhat larger than is usually recommended. From two to three grains may be given to a child two years old, and repeated in ten or fifteen minutes, until emesis is produced If the first dose fail, the second usually acts as soon as it reaches the stomach In this country turpeth mineral is rarely used on account of the violence of its action.

England.

RENAL DISEASE.—Dr Fife, in his report on the diseases treated at the Sunderland and Bishop-Wearmouth Infirmary, published in the *Provincial Medical and Surgical Journal*, says that renal diseases are of frequent occurrence in that locality. The cause of this is probably to be met with in the occupations of those principally affected, rather than in any endemic or topographical peculiarity. A large proportion of the cases occurred in ship-carpenters, seamen, glass-men, and ironfounders, in all of whom the function of the skin is liable to both frequent and serious interruption. When to this fact is added the recognised connection or relation subsisting between the cutaneous transpiration and the secretion of urine, a very satisfactory explanation is afforded of the frequency of urinary diseases. Another cause which has been supposed to operate in the causation of diseases of the urinary system, is the nature of the water with which the town is supplied, and which contains a considerable quantity of saline and earthy matter, especially lime. To this source he does not, however, ascribe much importance, as were it really an active agent, the cases in all probability would have been more frequent in occurrence, and different in character. By far the larger portion of them partook of the subacute or chronic inflammatory nature, being accompanied by both the symptoms and condition of urine known to denote such state of the kidneys, and which circumstance is quite consistent with the very common and obvious cause to which allusion has already been made. So far as the urine was tested, it exhibited the usual deviations from its healthy condition. In some cases albumen was present in considerable quantity; in a majority acid preponderated; whilst in a few an alkaline redundancy prevailed, which last state was perhaps in some degree attributable to the treatment, in which alkalies formed a prominent feature. The treatment consisted principally in alteratives, aperients, the preparations of soda, potass, and magnesia, with hyoscyamus, counter-irritation by means of the antimonial ointment, croton oil, turpentine, and in a few of the more acute cases, topical blood-letting and blistering, the unpleasant effects of the latter being, as far as possible, obviated by the exhibition of anodynes and diluents. In a later stage of the disease, in many instances, turpentine and copaiba in small doses were of the very highest utility. When the inflammatory action had been fully subdued, tonics, and more particularly the preparations of iron, were generally given with benefit. Three cases of diabetes mellitus were treated by Dr. Fife. One terminated fatally; another continued to linger at the date of the report; and the third, a young woman, was apparently cured by medicine, the symptoms of the disease not having returned for a twelvemonth. With respect to this disease, Dr. Fife agrees with those who regard it as not essentially referable to the urinary organs, but, on the contrary, dependent on some peculiar morbid condition of the organs by which digestion is carried on. The following circumstances seem corroborative of this opinion:—The almost universal presence of dyspepsia, which, when the history of a case is thoroughly sifted, will be found to have existed for some time before the increased flow of urine attracted attention; the effects of remedies, medicinal and dietetic; and above all, the appearances met with on dissection of those who have died of the disease. The first proposition acquires strength from the well-known influence of defective or depraved action of the assimilating organs over other secretions; wherefore it is no stretch of analogy to infer a similar effect on that of the urine. The second derives support from the utter inutility of those remedies, which are admitted to act most beneficially in diseases of the kidneys and bladder, in cases of diabetes. The last from the fact, that the anatomical changes in the urinary organs, found after death in those who have died of diabetes, are in no degree commensurate with the functional disorder, if such were confined to the kidneys, which in three cases examined by him, displayed *no change of structure;* whilst the stomach and assistant viscera were unequivocally and organically diseased. That such should be the case might be safely inferred, even during life, from a variety of circumstances which were present, to a greater or less extent, in almost every case of diabetes which he saw. Amongst the most prominent symptoms of the disease are, morbidly increased appetite for food; incessant and insatiable thirst; dry, parched, and harsh skin; the tongue red, dry, streaked with mucus, but more commonly presenting a general raw appearance, as if deprived of its ordinary membranous covering, the papillæ being partially, if not entirely, obliterated. To these may be added the dry, lank, and woolly state of the hair, and also an almost indescribable appearance of the sclerotic coat of the eye. The alvine discharges are, except when aperients are given, scanty and very irregular, taking place at the lapse of two, three, or four days, and sometimes at much longer intervals of time, and invariably exhibiting a marked deficiency of bile; when, however, an active purge, as a full dose of the castor oil, is given, the quantity of the discharge is frequently enormous. To such accumulation of feculent matter is to be ascribed the irregular unyielding hardness of the abdomen, which may or may not be accompanied by distension. All these symptoms tend to show that whatever part the kidneys may play in this very formidable disease, the digestive system at large is more than secondarily implicated, if not the absolute *origo mali.* The appearances met with after death were confirmatory of this view of its pathology, being almost entirely, so far as any actual change of structure is concerned, strictly confined to the stomach and its assistant viscera, whilst the only changes met with in the kidneys were the following, which cannot be properly regarded as constituting organic lesion:—In one of the cases both kidneys were paler in colour, flatter, and more flaccid than in the natural state; their substance was less firm, but not to such an extent as to render the term softened justifiable; both the pelves and the infundibula were enlarged, many of the latter obliterated; no trace of inflammation was present. The stomach was of its normal size, but its coats, even before it was cut into, were most evidently attenuated; when it was opened the villi were in every part wanting, the whole surface presenting the appearance of a highly inflamed and congested membrane, being smooth, except in one or two small patches where ulceration had occurred, the vascularity generally arborescent, but in many places assuming the aspect of extravasation beneath the membrane. The whole mucous coat was soft and pulpy, being readily removed by the finger nail, when even lightly used. The muscular coat was hardly discernible, whilst the peritoneal or serous presented no unusual change. In this case the pancreas was larger than natural, flabby, and easily torn; in another case this gland was harder than in health. The liver was paler than in health, and somewhat softened, but not to such an extent as to lead to the belief that such change was the effect of disease, but perhaps more properly attributable to the gradual wasting and exsanguined state of the system consequent thereon. The gall-bladder contained a small quantity of dark-coloured viscid bile. The mucous lining throughout the intestinal canal was more or less vascular, and in many points ulcerated; this last appearance probably had no direct part in the disease which forms the subject under consideration, but rather occurred as it does in phthisis and other diseases which terminate in hectic. The foregoing statements all refer to the case of a female, with the exception of the remark, that "in another case the pancreas was hardened." She had suffered long from the disease, and died apparently from some sudden and serious lesion of the brain, which unfortunately was not examined, owing to the close approach of the interment, which was fixed for the same day. In one of the other cases only was there anything unusual met with in the kidneys beyond what has already been noticed: this was simple venous congestion. The treatment which Dr. Fife has noticed to be the most beneficial, has been that addressed to the digestive system, and consists in the employment of alteratives, sudorifics, chalk, iron, and occasional aperients. In most cases calomel is to be preferred to any other mercurial, and it may be advantageously combined, either with tartrate of antimony, or Dover's powder: where there appears to be much gastric irritability, Dover's powder has the best effect, and if the tartrate of antimony be used, it should be given in combination with either opium or the hydrochlorate of morphia, either of these combinations affording at the same time the best chance of acting on the skin. In this disease, however, diaphoretic medicines seem to have but little power, and should, therefore, where it can be procured, be assisted by the warm bath, which may,

provided there be not great debility present, be employed on alternate days. Whilst the red state of the tongue continues, Dr. Fife has given the chalk in full doses with very decided benefit, generally alone, but sometimes in conjunction with the Dover's powder. So soon as the irritability of the stomach has been somewhat diminished, the sulphate of iron, with or without quinine, has been used, and great improvement has been the result; another very useful formula is the citrate of iron with quinine in solution, or in a simple bitter, as the quassia. For common drink, where, as is generally the case, the thirst is urgent, one part of lime water with two or three of milk, both allays this distressing symptom, and also acts beneficially on the lining membrane of the stomach. The diet of diabetic patients should be chiefly composed of animal food, as beef and mutton, in the form of chop, or steak, with as little bread or vegetable as possible, and where the state of the stomach does not forbid it, wine or malt liquor may be allowed. Dr. Fife does not think that bread, when taken in small quantity, produces the bad effects attributed to it by many; at the same time the most manifest injury arises both from it and vegetables when taken in the ordinary manner.

Spina Bifida.—Dr. Barclay, in the *Provincial Medical and Surgical Journal*, details the case of an infant, labouring under spina bifida, respecting which he was consulted. The tumour was situated on the back part of the head and neck. He then gave no hopes of the infant's surviving. He was again requested to see the child, in conjunction with Mr. Derington, when it was eight weeks old. It presented a most singular appearance, particularly in the erect posture; a large vascular bag, filled with fluid, and nearly the size of the child's head, hung from the occiput, and by its weight, though it partly rested on the shoulders, the cervical vertebræ were considerably displaced, and the head drawn backwards. The pedicle by which this bag was attached, was extremely short and flat, about an inch in width and a line in thickness; to the feel, like a fold of skin, and only in the centre appearing to have any connection with the cranium, over which it was moveable, except at this point. No perforation nor imperfection in the bone could be detected; and when very considerable pressure was exerted on the bag, no effect was produced on the child. They, therefore, determined on evacuating the sac, and six ounces of clear yellow serum were drawn off, but no further light was thrown on the nature of the case, while the child seemed relieved by the removal of the load. It then had exactly the appearance of a wrinkled empty scrotum hung on to the occiput. In three days it was found to have filled again considerably, and they then determined to try to rid the child of this unsightly deformity; Mr. Derington passed a double ligature of strong silk twice through the flat pedicle, and tied the loops on either side, and the remaining one in the centre, with very considerable force, though not sufficient to strangulate it completely; about three ounces of fluid similar to the former were evacuated. On the next day the ligatures were tightened; and on the fourth day, the pedicle being partly ulcerated through, fresh ones were applied, so as to strangulate the sac completely. Two days afterwards it had sloughed, and was so offensive that Mr. Derington removed it close to the ligatures; it appeared lined internally with a glistening membrane. The child looked well and healthy the next day, and as the administration of "Godfrey" had been discovered, and strictly prohibited, it put on a thriving appearance, but was seized with convulsions two days afterwards, and died the same evening, with all the symptoms of effusion within the cranium. A scanty permission was obtained to examine the seat of disease only. About a line above the os occipitis was a foramen about the size of a crow-quill, giving passage to a cord like the vas deferens. It did not appear pervious, but a single probe could be passed obliquely downwards through the foramen, quite to the posterior part of the medulla oblongata. The occipito-parietal sutures were hurriedly ripped open, and the occipital bone forcibly reflected, when the channel was seen to be connected with the dura mater, but the impatience of the persons present prevented the possibility of the relative position of the parts being more satisfactorily observed. The brain and its membranes were loaded with serum, which flowed in considerable quantity from an incision penetrating to the ventricles.

Iliac Abscess communicating with the Rectum and Bladder.—Mr. Russell describes, in the *Provincial Medical and Surgical Journal*, the case of a man, fifty years of age, who, after suffering from supposed rheumatic pains in the back, and left hip, and thigh, had pain in making water, with frequent micturition, which was followed by the formation of a large tumour in the lower part of the abdomen, on the left side, and the setting in of irritative fever. When first seen by Mr. Russell, the tumour was large and prominent, and occupied the whole of the left iliac region, extending a little across the median line, and obliquely upwards, nearly to the lower edge of the left ribs. It was firm and tender, but the abdomen in other parts was flaccid, and free from tenderness. Soon afterwards pus was discharged both by the urethra and by the rectum. The patient next became hectic, and the soft palate and tonsils aphthous. The tumour afterwards burst externally, and discharged a large quantity of very fetid pus. This was succeeded by the discharge of urine and fæces through the wound, and at last the unfortunate man sunk exhausted. The body was examined eighteen hours after death. The abdomen alone was examined; the surface of the viscera was perfectly healthy; not a trace of any abnormal matter in the cavity. All the viscera healthy, with these exceptions:—There was singular absence of blood; the rectum took a very unusual course; it passed from the termination of the colon in place of at once descending into the pelvis, towards Poupart's ligament, adhering to this part of the anterior wall of the abdomen by cellular bands, and thence descended abruptly into the pelvis, forming an acute angle, situated a little above Poupart's ligament, and rather internal to the middle point; surface of the rectum quite healthy; a considerable quantity of fat surrounded the adhesions and the gut. The integuments were separated from the muscles in the left iliac region of the abdomen by the cavity of the abscess, which was nearly empty of pus, but with the walls in a state of slough. From these parts the abscess passed behind the horizontal ramus of the pubes, entirely separating the bladder from its anterior connections, in front of Poupart's ligament into the iliac region of the thigh, deep among the muscles towards the bone, and also occupied the iliac fossa, having raised the iliac fascia from its connection with the muscles, infiltrated the iliacus internus and psoas with sanious pus, and extended along the psoas as high as its origin from the spine; at the highest point the pus was of a healthy character, and was strikingly contrasted with the sanies contained in the rest of the abscess. The bones in the neighbourhood were examined most carefully, and were found not to be denuded; the ilium was covered throughout by its periosteum, and the spinal ligaments were not at all invaded. On laying open the rectum, an ulcer was discovered at the acute angle formed by the gut, near Poupart's ligament, which communicated with the cavity of the abscess by a short passage through false membrane; the adhesion in this part had become so much weakened that in a day or two, had life continued, the ulcer must have opened into the cavity of the abdomen. It had evidently commenced from within, the mucous membrane being destroyed for the space of a shilling, whilst the opening in the side of the gut was not larger than the section of a pea; the mucous membrane of the rectum was injected, but otherwise healthy; the mucous membrane of the large intestines, and of the cœcum, together with the lower portion of the ileum, were healthy. Bladder healthy, excepting a small ulcer, large enough to admit a large probe, in its left side, which opened into the abscess through a short sinus; in this case the absorption of the coats had proceeded to a greater extent on the outside; the bladder contained some urine, loaded with pale lithates, but apparently without any pus. Iliac vessels healthy. Some atheroma in the abdominal aorta.

[The folllowing are the only articles of interest to the profession in the last two numbers of the Lancet.]

Encephaloid Disease of the Peritoneum.—Some brief details of a case of ascites are reported from St. Bartholomew's Hospital, in which dissection revealed the existence of encephaloid disease of the peritoneum. The fluid drawn off by paracentesis on the first occasion, coagulated spontaneously. The right lower extremity was œdematous before death. The autopsy was made nine hours and a half after death, when the body was still warm, the limbs all lax, and the blood generally coagulated. Head not examined. Some old adhesions of the left pleura about the base; no notable quantity of fluid in the left pleural cavity; right pleura free, the cavity containing about a pint of clear serum. The right half of the upper surface of the diaphragm was studded with little, round, polished, white elevations; no such deposit existed on the left side. Base of the right lung slightly contracted, and the pleura wrinkled; both lungs were gorged with blood behind, but no deposit existed anywhere in them. The cellular surface of the reflected layer of the pericardium, behind the sternum, had a few white nodules attached to it, of the same character as those which grew upon the diaphragm. The serous surface was smooth, the cavity containing a few drachms of clear fluid. Heart small, healthy. The rectus abdominis was seen to be full of white, opaque granules, especially at its attachment to the thorax; peritoneum contained a large quantity of clear fluid, in which floated a single flock of whitish fibrin, like an ostrich feather; the layer lining the walls of the abdomen was thick and tuberculated with a hard, white deposit. On the removal of the fluid, the small intestines were seen running down the centre of the abdomen in a spiral coil, tightly bound to the spine by a thickened and short mesentery, and to one another by an adhesion here and there between the folds. They were of a faint purple tinge, with a mottled-white, tuberculated deposit upon the serous surface. The liver was coated with a thin, white layer of fibrin, and adherent to the stomach, between which and the colon lay the great omentum rolled up into a white, hard cord, appearing on section to be composed of little grains of fat, from between which a creamy fluid exuded on pressure. From about here, two or three round cords, containing pervious vessels, passed to the front of the abdomen. The tuberculated deposit was confined exclusively to the serous membrane; it was in some places as thick as a crown-piece, but in no part was the muscular coat implicated, and the mucous membrane was healthy throughout, although the form of the intestinal canal, and particularly of the stomach, was very much altered by the rigid case in which they were partially enclosed. The duodenum, where it has no serous covering, was quite free from any lesion of the kind; while all the rest of the intestines, the stomach, and the mesentery, were dotted over with nodules of this sort, from the size of a split-pea to that of a broad-bean, or even larger—all hard, and with polished surfaces, none giving issue to any fluid on pressure. Liver adherent, except at the thin edge: internally it was healthy, but the gall-bladder was studded with numerous deposits. Spleen and kidneys healthy; mesenteric and lumbar glands enlarged, white, hard, but giving issue to a creamy matter on pressure. The right inguinal glands, and one absorbent gland between the axilla and the mamma, had also undergone the same degeneration. Veins of right thigh healthy. A small cyst existed in each ovary, larger in the right, and holding about four ounces of a thick, brown fluid; the peritoneal surface, but not the cystic, was tuberculated as above. These cysts rose above a hard floor of thickened peritoneum, extending from the ossa pubis to the rectum, having no traces of the fossæ usually found there. Below this the uterus lay imbedded in a hard, tough, cellular tissue, in which were a few spots of deposit, such as existed elsewhere; but the uterus itself was quite free from them: it was bent into a curve, the concavity forwards, the mouth slightly vascular. The fluid withdrawn in this case spontaneously coagulated on the first and not on any subsequent occasion. The same spontaneous coagulation was observed in a case of cancer of the peritoneum lately treated in Addenbrooke's Hospital, Cambridge. But so far from this being diagnostic of the disease, Cruveilhier has found the fluid bloody and turbid in cases

of cancer of the omentum, where the fluid was probably secreted under conditions analogous to those in the case detailed; and in the dissection of a case of cancer of the peritoneal surface of the colon, accompanied by ascites, occurring in the practice of Mr. Paget, the fluid was most singularly limpid and colourless. In the above case, the tendency of the disease to attack serous membrane was displayed in the pericardium and right pleura, as well as the peritoneum. The affection of the pleura, and accompanying effusion, is interesting in connection with Sir B. Brodie's remarks on pleural effusion, as being the common mode of termination of protracted cases of mammary cancer. Here, however, were no scirrhous tubercles in the lungs; they were found only on the diaphragmatic pleura. In another case the encephaloid disease affected principally the omentum. The patient was a female, aged fifty-one years of age, who had a swelling in the left inguinal region, which was greatly increased by injuries inflicted by a horse, which trod on her abdomen. When admitted into the hospital the abdomen was irregularly conical in shape, the umbilicus being the apex of the cone. A large round swelling could be felt in the left iliac fossa, and a smaller, less defined, in the right. Some parts of the abdomen were soft and yielding; in other parts there were small, round, hard, and freely-movable tumours, tender on pressure, and extending as high as the epigastrium. The patient lived only two or three months after she entered the hospital. The body was much emaciated; heart small, and retaining a little fat about the apex only; lungs healthy, but traces of recent pleurisy on the left side. A singular appearance was given to the contents of the abdomen by the omentum, which, thickened and as white as if painted in parts, extended a tough edge from the right hypochondrium to the left iliac fossa, where it became connected with a white mass of similar composition, filling the pelvis, and re-appearing in the right iliac fossa. This mass was soft and pulpy, making a white turbid mixture with water; and when the fluid parts had been thus washed away, there remained a hard, white, elastic, fibrous tissue, constituting the body of the tumour, into which the white creamy fluid had been infiltrated. The lining membrane, and part of the thickness of the walls of the uterus, was healthy, but the outer surface of its walls had imperceptibly become implicated in the degeneration of the surrounding parts. A patch of the same kind of matter existed on the coat of the gall-bladder, but no traces of similar degeneration elsewhere, the serous surface of the stomach and intestines being quite healthy. Carcinoma of the substance of the uterus not affecting the mouth of that organ, is the most striking single fact illustrated by the above case. As compared with the previous case, the chief point of interest is the result of the different dispositions of the omentum. Had fluid been effused from the beginning, and the omentum rolled up in a cord, as happens in chronic peritonitis, the resemblance of the two cases in detail would have been very close, so much does the after progress of disease depend on the order in which any of the earlier processes have succeeded each other. In one point, these two cases differ widely from each other; the affection seemed in the former to attach itself particularly to the serous membranes; in the latter, the omentum was almost the only part of the peritoneum affected, although so broad a surface was presented on which this morbid product had been developed. As the omentum seems to be the part of the peritoneum most susceptible of cancerous degeneration, judging from recorded cases of cancer affecting this part only, so it is most probable that the morbid process going on in the ovarian tumour was communicated directly to this more susceptible part, rather than to the serous membranes of other parts around. Thus, in a man who died in the hospital in 1842, of extensive cancer of the stomach, the omentum was the sole portion of the peritoneum much implicated, only a few carcinomatous tubercles existing at the bottom of an old hernial sac, excited, as it appeared, by the irritation of the pressure of a truss.

Presumed Injury of the Axillary Artery. —A man was admitted under Mr. Quain into University College Hospital, with a lacerated wound, about an inch in length, in the left axilla, from which arterial hemorrhage (according to report) had issued to the extent of two quarts. It had ceased spontaneously. Pulsation was distinctly felt in the left radial, but the next day no pulsation could be distinguished in any of the ateries below the wound Five or six days afterwards a feeble pulse was felt in the radial artery, and, from this time, the case progressed favourably, the wound granulated kindly, and was perfectly healed at the end of three weeks, when he was discharged. He returned to the hospital a few days afterwards, complaining of pain over the back part of the shoulder, for which the belladonna plaster was ordered. He stated that the temperature of the left hand appeared to him to be less than than that of the right; the thermometer indicated for the left, 91 deg., for the right, 93 deg. In a clinical lecture, Mr. Quain observed that the important point in the foregoing case was the fact that, notwithstanding the occurrence of profuse hemorrhage, and the injury of the main artery of the limb (as shown by the cessation of the pulsation in the arteries beyond the seat of injury), the patient did well, without any interference by operation or otherwise. There was a want of evidence for forming a positive opinion as to the source whence the hemorrhage proceeded; for, as the patient was not seen by any medical practitioner till after the bleeding had ceased, there was no evidence on which reliance could be placed, either as to the manner in which the blood had issued from the wound, or as to the character of the blood itself, and there was not therefore sufficient means of judging whether it escaped from an artery or from a vein. The amount of hemorrhage was doubtless exaggerated, as is usual with patients and their friends in cases of wounds. He was of opinion, after the recovery of the patient, that the axillary artery was not the vessel from which the blood had escaped, because the hemorrhage soon ceased, and did not recur. No tumour had formed at the seat of injury, and the pulse was for some time perceptible below the wound. It should be stated that the condition of the pulse in the two arms was not compared after the patient's admission into the hospital, but the surgeon and the dresser concur in stating that the pulse in the injured arm was an ordinary one. When Mr. Quain saw the case next day, the pulse at the wrist was not perceptible. On a review of all the facts, at the fortunate conclusion of the case, it appeared probable that the vein had been wounded and that the artery was obliterated in consequence of having been contused by the end of the rail; it was admitted that the reasoning is not to be considered by any means conclusive. Fortunately for the patient, no opportunity arose of clearing up the doubt. If arterial hemorrhage had occurred, Mr. Quain intended to divide the pectoral muscles over the track of the wound, and secure the bleeding vessel at each side of the opening into it; the hemorrhage would in the mean time have been commanded by pressure above the clavicle, and by an assistant's finger within the wound. *** From this last paragraph it would appear that Mr. Quain is in favour of the plan of proceeding recommended by Mr. Guthrie, and in direct opposition to that adopted by his colleague, Mr. Liston, although at the meeting of the Royal Medical and Chirurgical Society, he expressed a qualified approbation of Mr. Liston's operation.

Dislocation of the Humeri.—A case of simultaneous dislocation of both humeri from a fall is reported from St. Bartholomew's hospital. The nature of the injury was not discovered until a fortnight after the accident. The left humerus was dislocated under the pectoral muscle, and the right into the axilla. The right limb, however, performed its movements so freely that no one at first conjectured that it was injured. Reduction was readily effected, and the patient did well.

Penetrating Wound of the Chest.— A case of penetrating wound of the chest, in which the lung was apparently wounded, is reported from St. Bartholomew's hospital. The patient stabbed himself several times in the chest just below the left nipple with a carving fork. Emphysema ensued, and the man complained of a weight at the chest in breathing. The wounds were dressed simply; the emphysema gradually disappeared, and the man was discharged cured in a fortnight. Mr. H. Coote remarks on this case that some surprise may be experienced how a sharp instrument, penetrating the cavity of the chest to the depth of three and a half inches just below the left nipple, and wounding the lung, could have missed injuring the heart and pericardium. The heart, an organ of variable size; is separated from the walls of the chest in this situation by the thin edge of the left lung, which rests upon the pericardium. An instrument entering at the left nipple, and directed obliquely outwards and backwards (as would be the case if the patient were right-handed), would pass from this portion of lung to the left of the heart, into the general pulmonary tissue.

Lacerated Wound of the Elbow-joint.— A case is reported from St. Bartholomew's Hospital of lacerated wound of the elbow-joint, with separation of the external condyle of the humerus, occurring from an accident by machinery, in a boy, eleven years of age. The external condyle was removed, and the arm set at right angles. Partial sloughing took place, but the slough separated, and the wound healed by granulation, the arm remaining fixed at a right angle.

Compound Dislocation of the Knee-joint. —A case of this injury is reported from the Tunbridge Wells Infirmary. The patient, a labourer, twenty-one years of age, whilst working in the railway tunnel near this place, fell from a scaffold, a height of ten or twelve feet. A heavy piece of timber falling after him, appears to have struck him on the front of the lower part of the femur; and the upper part of the leg lying at the time across an iron rail, a compound dislocation of the tibia forwards was caused, the internal condyle of the femur being driven through an extensive wound in the popliteal space, the external condyle, resting on the posterior part of the head of the tibia. The leg being bent forwards and outwards, the tibia appeared to be twisted somewhat laterally; the patella was pushed upwards, its inferior edge directed forwards, and its posterior surface resting on the articulating surface of the tibia. A depression was perceptible superiorly; the limb was shortened about an inch and a half; the leg could be slightly rotated inwards or outwards, more particularly outwards, but not flexed until after the reduction of the dislocation, which was, however, easily effected. There was profuse hemorrhage at the time of the accident; no pulsation could be felt either in the posterior tibial or in the tarsal artery. The surgeon first in attendance, after reducing the dislocation, and having carefully closed the external wound with sutures and adhesive plaster, applied a bandage over the whole; it was deemed prudent to wait before deciding on amputation. Three days afterwards it was evident that no adhesion had taken place; moreover, considerable constitutional irritation had set in, and on raising the leg to remove some of the dressings, a sudden gush of blood, evidently from a very large artery, determined Mr. Hargraves to amputate immediately. The limb was removed, by means of the flap operation, at the lower third of the thigh, but, apparently owing to the great loss of blood sustained at the time of the accident, the poor fellow rapidly sank, and died five hours after. Dissection of the injured parts: on removing the integuments, great extravasation of blood was found, quite filling up the popliteal space, and extending nearly to the ankle. Both heads of the gastrocnemius were extensively lacerated; the internal quite torn through; the popliteus torn across; the semi-membranosus lacerated; the tendinous expansion forming the ligament of Winslow torn into shreds, but the round tendon not injured; the biceps very slightly injured; the tendons of the sartorius, gracilis, and semi.tendinosus quite perfect. The popliteal artery was lacerated to the extent of half an inch, but not torn quite through, and (as was apparent when the joint was re-dislocated) pushed together with the vein and nerve external to the outer condyle of the femur. The internal lateral ligament was torn from its attachment to the femur, carrying with it a small portion of bone; the external lateral ligaments were not injured; the external or anterior crucial ligament was torn through, but the internal or posterior crucial ligament was not injured; the aponeurosis supplying the place of a capsular ligament, besides being extensively torn behind, was also ruptured in front, just external to the ligament of the patella,

where a portion of the head of the tibia had protruded. Mr. Yate, the reporter, says there are several points of great interest in this case well worthy of notice. It appears at first astonishing that fatal hemorrhage had not been the consequence of such an injury to the popliteal artery, but the fact of this vessel being put upon the stretch and firmly compressed over the external condyle of the femur, and a coagulum having formed around the injured part, will efficiently account for the cessation of the bleeding; a state approaching deliquium animi no doubt also favoured this circumstance. The displacement of the internal condyle was such as could not possibly have occurred without the rupture of the internal lateral ligament, which, arising from the internal condyle of the femur, passes downwards and forwards to the head of the tibia, but the external lateral ligaments, which arise from the external condyle, and descend backwards to the head of the fibula, were not necessarily injured. Again, the anterior or external crucial ligament, which arises from the posterior part of the external condyle, and descends obliquely forwards to the fore part of the head of the tibia, was as might be expected, ruptured; but the posterior, or internal crucial ligament, which arises from the fore part of the internal condyle and descends vertically, or rather backwards, to the head of the tibia, was not injured. The leg could be easily rotated outwards, owing to the complete separation of the internal lateral ligament; but the rotation inwards was very circumscribed, owing, doubtlessly, to the resistance offered by the external lateral ligaments, which were unbroken. Sir A. Cooper relates a case of compound luxation of the femur backwards and outwards, where neither the lateral nor crucial ligaments were ruptured; but in his case, the external condyle was driven backwards and outwards, the internal condyle being thrown forwards upon the head of the tibia—a state of things which will be seen to be exceedingly probable, if we consider the anatomical relation of those parts. In conclusion, the above case, in Mr. Yate's opinion, goes far to prove the propriety, perhaps the necessity, of immediate amputation in a compound dislocation of this joint; for surely Nature cannot be expected to repair so serious and extensive an injury. *** There cannot be a doubt that amputation ought immediately to have been had recourse to.

Malignant Diseases of the Stomach.—A case of encephaloid disease of the pylorus is reported from St. Bartholomew's Hospital, in which during life there were not any symptoms of a diseased condition of the stomach, except a most voracious appetite. The patient was admitted into the hospital, on account of weakness and tremors, partly perhaps arising from habitual intemperance, and partly from his occupation, that of a looking-glass silverer. Four days before death he was seized with pain in the head, vomiting, thirst, and loss of appetite. The body was examined twenty-four hours after death. Arachnoid white and opaque, with little white dots in the meshes of the pia mater. Substance of the brain soft, with numerous bloody points, and little vessels full of coagulated blood, drawing out like hairs on suction. The arteries about the base were thickened, and yellow in patches. The pleuræ were extensively adherent; the lungs generally emphysematous, œdematous, and posteriorly rotten, readily tearing down under the fingers. Beyond the enormous deposit of fat about the heart, and the deep staining of the lining membrane on the right side, there was little to notice in that organ. The peritoneal surface of the stomach was dusky, and injected near the pylorus; the mucous surface was red and rough, especially towards the pyloric end of the organ. The mucous membrane here, as in the upper part of the duodenum, was emphysematous; the sub-mucous cellular tissue of the stomach infiltrated with a creamy fluid, by which it was widely separated from the muscular coat, the whole of the coats together forming a thick membrane, traversed by fine striæ parallel to each other, at right angles to the axes of the stomach. The emphysematous condition of the mucous membrane tended much to obscure the particular local changes that it had undergone; but a small, white, fungous growth was attached near the pyloric end of the minor curvature of the stomach, while a ring of the same substance, presenting an appearance very like that of psoriasis, lay near the same place. There is nothing to notice in the small intestines or mesenteric glands. The liver was large, indented by the pressure of surrounding parts, and, as viewed by the microscope, in a state of commencing fatty degeneration. A few cartilage-like bodies, small, with opaque spots and striæ, without any enveloping membrane, were scattered beneath the capsule, and throughout the substance of the organ. A lobular mass of fat, partly crossed by fibres of the cremaster muscle, lay attached to the spermatic cord on each side, chiefly external to the inguinal ring. Next follow the details of a case of scirrhus of the pylorus, the principal symptoms being continued and severe vomiting, constipation, extreme progressive emaciation, and the presence of a large quantity of urea in the urine. The body was examined thirteen hours after death. Lungs generally emphysematous; the black pulmonary matter on the surface contrasting strongly with the pale-white colour of the rest of the organ. Within, they were œdematous, breaking down readily under the finger, but resisting traction well. A small pulmonary abscess existed near the apex of the left lung, close beneath the pleuræ. Stomach more than four times the ordinary size; externally healthy; within, stained of a dirty purple, and coated with thick mucus, beneath which, the mucous membrane appeared entire, but *mamellonnée* in an extreme degree—this towards the pylorus; at the cardiac ends the coats were partially digested. The stomach contained a large quantity of the same kind of fluid as had been vomited during life. The pylorus was contracted—so as hardly to allow the passage of a common pencil—by means of a hard ring projecting all round, single on the side that lay uppermost, but on the side nearest the pancreas double, the two ridges leaving between them a cavity big enough to contain a hazel-nut. Perhaps the whole morbid growth was not more than an inch and a-half in diameter, the pyloric orifice of the stomach lying in the middle of the thick ring. Some small, white, hard bodies were found in the gastro-splenic omentum; none elsewhere. The mesenteric glands were rather large, but grey, and of natural consistency. Except a little black dotting of the follicles of the colon, the intestines were generally healthy. There can be little doubt that any other mechanical obstacle, acting to the same extent, would have produced analogous results by vomiting and progressive emaciation; for the scirrhous substance, in the present instance, had not undergone any change by ulceration on the surface; it was merely a hard annular mass, which, but for the little bodies in the gastro-splenic omentum, could hardly have been ascertained to be of scirrhous nature, the existence of these little bodies being the only evidence that the pyloric disease was not purely local; yet this small mass of fibrous cancer had produced the severest symptoms, while in the former case a far greater extent of encephaloid cancer had existed, not only without a single symptom referable to the stomach, but with proof of an unusual degree of activity of the functions of that organ. A third case is also detailed, in which the symptoms resembled those described in the second instance, but the amount of disease was much greater. The body, on examination, presented an appearance of the most extreme emaciation. The heart was of not more than one-third the usual size, and quite without fat. The black pulmonary matter beneath the pleura contrasted very strongly with numerous small white patches on the surface, and entered a little way into the substance of the lungs, which, with the exception of a few earthy concretions, were otherwise healthy. The stomach was reduced to a thickened mass, about the ordinary size of the colon. Internally, it had the appearance of a recently ulcerated surface; the scirrhous degeneration implicating the whole circumference of the organ from the pylorus nearly to the cardiac extremity. Its walls were, on an average, half an inch thick throughout; in some points, full three-quarters of an inch in thickness. There was an extensive deposit of scirrhous tubercles in the omentum, and a few, as noticed in the first case, were scattered about an old hernial sac.

Acne.—Mr. Hunt describes cases of acne, in which he effected a cure by the internal exhibition of arsenic, given in small doses, and its use persevered in for rather a lengthened period. Acne rosacea, he says, is an inveterate form of acne simplex, but differs much from that disease in some particulars. Instead of appearing at the age of adolescence, it belongs rather to the decline of life, commencing at the middle period; and instead of spontaneous disappearing after a time, it usually gets worse and worse, unless checked by medical treatment, till death. The locality of acne rosacea is also peculiar. Instead of appearing on the forehead and chin, its seat and centre is almost invariably the point, or, more rarely, the alæ of the nose, from which it radiates laterally, gradually extending over the cheeks, and affecting the adjacent skin in all directions. The point of the nose first becomes redder than natural, especially after meals, or on exposure to cold or heat; the veins of the part become visible, then pustules form, and slowly progressing through their stages, leave the skin permanently thicker than natural, and puckered with small cicatrices. In its advanced stages, the disease sometimes disfigures the face to a frightful extent; and being, in a few cases, the penalty of dram-drinking, it becomes particularly afflictive to the temperate, in whom, however, it is at least as common. Like other forms of acne, it attacks both sexes, and occasionally occurs as a degeneration of acne indurata of long standing. But the subjects of acne simplex are more generally exempt from acne rosacea. The treatment of acne rosacea has been hitherto unsatisfactory in its general results. Rayner says, the disease "almost always returns after medicines are abandoned, with a rapidity and regularity that induce despair." This is strong language, and from a man of Rayer's experience, most discouraging. Indeed, so general is the impression that it is incurable, that patients rarely seek medical advice for this disease, and still more rarely do regular practitioners undertake the cure in a methodical or persevering manner. Certainly, among the numerous or ill-defined varieties of this disease there are two, the cure of which cannot be reasonably expected. 1. The disease is in some cases hereditary, and, perhaps, likewise congenital. Early in life the nose is slightly affected by the disease, and by degrees, becomes incurably hypertrophied and deformed. Mr. Hunt has more than once known it complicated with an irritable condition of the rectum and with chronic hemorrhoidal affections, the irritation oscillating from one extremity of the intestinal tube to the other. These disorders can be *alleviated* by medical treatment, but there is something originally wrong, which probably can never be rectified. 2. The acne rosacea of the drunkard, connected frequently with visceral disease, is placed by the habits of the patient beyond the control of medical art. With these two exceptions, the varieties of acne rosacea present nothing which justifies an unfavourable prognosis, much less despair. Mr. Hunt relates the case of middle-aged lady, who was affected with this disease, and was apparently cured by arsenic, but neglecting her medicine for a few weeks, induced a relapse, which was again cured by the internal administration of the mineral. A twelvemonth afterwards the disease recurred, but in a milder form, and was soon cured by the mineral. It has not since returned. He regards sycosis as a variety of acne, and also treats it by arsenic, which appears to be his sheet-anchor in skin diseases.

Scotland.

Castor-oil in Affections of the Mucous Membrane of the Bowels.—Dr. Spencer Thomson states, in the *Monthly Journal of Medical Science*, that castor-oil, in the form of emulsion, possesses a really specific power of curing, unassisted, irritation, subacute inflammation, or ulceration of the mucous lining of the bowels. He thinks there are not many cases of infantile or aphthous diarrhœa which are not curable by it alone. In stating this, he alludes to the disease as it occurs during the first year of life, especially among children improperly fed, commencing with sickness, and frequent griped evacuations, varying in colour from greenish-yellow to dark grass-green; these becoming more liquid, and more or less mixed with slimy gelatinous mucus, streaked with blood, or even

at last with a predominance of blood, cachevacua tion being accompanied with pain and tenesmus the mouth dry and aphthous; the anus inflamed the belly tumid and painful; the child becoming more and more feverish, emaciated, and somnolent. In most cases presenting the above symptoms, indicative, according to their severity, of irritation, subacute inflammation, or ulceration, he believes the emulsion of castor-oil with yolk of egg, combined or not with very gentle opiates, will be found sufficient to effect a cure. It is not of course meant that the diet is to be left unregulated, or that assistance is never to be derived from the warm bath, liniments to the belly, or occasional doses of mild mercurials; but these, especially the latter, are only to be regarded as accessories. No mercurial so quickly changes the character of the evacuation as the emulsion, which only requires to be steadily persevered in. The following is the form in which he generally prescribes it for infants:—For an infant of from two to four months old: R. Ol. ricini, ʒi—ʒiss; Vitelli ovi semis., Aq. anethi feniculi, āā ℥j. Ft. emuls. Sumat coch. parv. bis die. To this from two to six drops of laudanum may be added or not; but, of course, this as well as the amount and frequency of the dose, must vary with the case. The mixture is generally taken readily, and even liked. The same preparation is equally useful in that form of intestinal affection which is met with in children of from one to nine years of age, identical with the infantile type before cited, but presenting slightly varied symptoms, such as the tendency of the evacuations to become watery, brown, black, and very offensive; the picking of the lips, nose, &c. In a case of this nature which lately came under his care, the patient, a boy aged three years, lay almost insensible and somnolent. The evacuations, resembling black dirty water, and very offensive, were passed eight or ten times in the twelve hours. Other symptoms of subacute inflammation of the mucous membrane were also present. After the first dose of simple emulsion, there was no motion for thirty-six hours, all the other symptoms being ameliorated. The case, at the date of the report, was progressing favourably. In the diarrhœa and dysenteric affections of adults, the same form of medicine will nearly always effect a cure; it is especially useful in the diarrhœa of typhus, with symptoms of iliac ulceration. In a recent case of subacute hepatitis, in which exhausting diarrhœa was present, accompanied by painfully excoriated tongue, and great abdominal tenderness, the patient was preserved solely by the continued use of the emulsion. The medicinal action of the oil is certainly much modified by its union with the yolk of egg, for the same dose which would act well as an aperient when given alone, when thus combined will scarcely act at all. The preparation generally agrees well with the stomach; but in some cases of irritability of that organ, or where active bilious cholera exist, with frequent vomiting, it is well to delay its administration until the stomach is tranquilised by effervescing salines, hydrocyanic acid, or other usual remedies. In a concluding paragraph Dr Thomson states that the action of croton oil on children is much less marked than it is in the adult. He has frequently found the dose that would purge an adult freely, act as a laxative merely on a child.

Ulceration and Perforation of the Stomach.—Mr. Lawrence narrates, in the *Monthly Journal of Medical Science*, the case of a young woman to whom he was called, and found her labouring under symptoms of peritonitis. She had suffered from dull pain in the region of the stomach for five or six weeks previously; it was aggravated by pressure, and by a full meal. The case terminated fatally The examination of the body was made twelve hours after death. On cutting through the abdominal parietes, they were found perfectly healthy-looking The first puncture of the peritoneal sac gave vent to a considerable quantity of noxious gas, and on enlarging the opening, a large ... of turbid serum and grumous-looking amounting to about two Scotch pints, was nd effused among the contents of the abdomen. peritoneal covering of the bowels presented throughout a preternatural vascularity, and here and there a greyish slaty-looking aspect. There were neither purulent effusion, nor adhesions among the convolutions, nor any spot on these that seemed to have been more especially the seat of morbid action. The omentum was found abnormally thickened and vascular. On examining the stomach, a circular perforation, of the size of a fourpenny piece, was discovered on its anterior and upper aspect, almost in the line of its smaller curvature, and near to the cardiac orifice. On slitting open the organ, its coats, for a considerable way around the ulcerated opening, were found fully three-eighths of an inch in thickness, and the villous tissue highly vascular. The size of the ulcer was much larger in the mucous than in the muscular or peritoneal coat, thus giving it a conical form—its base directed inward, and its apex outward. In the cavity of the stomach was a considerable quantity of the same dark, grumous-looking fluid, which was found effused among the v scera.

Ireland.

New Test for Prussic Acid.—Mr. Austin, jun., in the *Dublin Hospital Gazette*, proposes a new test for prussic acid. The precipi tate of cyanide of silver, say half a grain, obtained in the usual manner, is mixed with a small quantity of oxide of iron and carbonate of potash, and the whole fused together in an iron or platinum capsule. The fused mass is then dissolved in half an ounce of distilled water, filtered, and rendered slightly acid by the addition of a few drops of hydrochloric acid. The liquid thus treated is next divided into two portions, to one of which a few drops of a solution of sulphate of copper is added, hich immediately causes the evolution of the chocolate-brown colour, so characteristic of the ferrocyanide of copper; and to the other a few drops of the muriate tincture of iron, or any persalt of iron, when the solution becomes intensely blue, by the formation of the ferro-cyanide of iron, the ordinary Prussian blue. In Mr. Austin's opinion, these two tests, with the well-known odour of prussic acid, are, independent of all others, sufficient to convince the medical jurist of the presence of free prussic acid. Mr. Austin adduces several arguments to show the superiority of this test over those already known to chemists, both in accuracy and facility of application, by persons not skilled in chemical manipulation. The precipitates above mentioned are very distinctly obtained with half a grain of cyanide of silver.

Idiopathic Gastritis.—Dr. Orpen describes, in the *Dublin Quarterly Journal of Medical Science*, the case of a lady, who was seized with a severe burning pain at the pit of the stomach, which was soon followed by insatiable thirst and vomiting; she had also a short convulsive cough. The epigastric region was tumid and sensitive on pressure, and was the seat of intense pain and soreness. There was great prostration of strength, oppression, restlessness, and palpitation of the heart. The pulse was small and feeble; tongue coated with fur, but red at the point and edges; bowels confined; urine scanty, and severe headache. There was not any pain or tenderness of the umbilical or lower abdominal region. Alcaline draughts were prescribed, and subsequently pills containing calomel, camphor, hyoscyamus, and opium, in small quantities. An enema was also administered, and a sinapism applied to the epigastrium. The symptoms, notwithstanding, became more severe, and the pain and tenderness of the epigastrium increased to such a degree, that the slightest weight could not be borne over that region. There were occasional hiccup, and great restlessness, and agitation. The bdomen was leeched and fomented, and effervescing draughts with laudanum exhibited, but without advantage. Prussic acid was accordingly substituted, but without corresponding benifit. The symptoms continuing very severe, the abdomen was again leeched, and ice exhibited internally, and applied by means of a bladder to the epigastrium. This soon afforded relief; the vomiting ceased, and in the course of a few days the patient became convalescent

A Small Infant.—Dr. Halpin records, in the *Dublin Quarterly Journal of Medical Science*, a case of parturition, in which, after forty-six hours of severe labour, a female child was born, so small that it did not appear to have attained the sixth month, corresponding in this respect to the mother's calculation. Contrary to all expectation it survived, and sucked vigorously. The ossification of the bones of the head was very imperfect; the sutures were broad enough to admit of the middle finger being laid between the bones; the fontanelles were of a correspondingly large size; and she had inguinal hernia on the left side. When four days old, Dr. Halpin weighed her accurately; the actual weight of the child was then two pounds thirteen ounces.

Dec. 14, she being	34 days old, weighed	3lb. 7oz.
27,	47	4lb. 4oz.
Jan. 10,	61	5lb. 4oz.
„ 25,	76	5lb. 12oz.
March 4, „	114 „	8lb. 8oz.

It will be perceived that, in the first thirty days, she gained but ten ounces; in the thirteen that followed she gained thirteen ounces, averaging one ounce per diem.

Land Scurvy Produced by Eating Diseased Potatoes.—Dr. J. McCormack has published, in the *Dublin Hospital Gazette*, the details of a case of disease, which he regards as an instance of land scurvy, and traceable to the use of diseased potatoes. The patient was a factory girl, sixteen years of age, a prey to wretchedness from extreme poverty; her food scanty and unwholesome; her hours of labour excessively protracted, and her work fatiguing. The disease commenced by pain in two of the front teeth, so acute as to preclude sleep at night, and to cause equally intense suffer ing during the day. There was also a sense of chilliness, and disinclination to exert herself in the least. This state continued for a week, when she was unable to leave her bed from excruciating pains in all her joints, and in the small of the back; there was burning heat of the skin, and sleeplessness with delirium for several nights; gums, mouth, and throat so sore as to be unable to take food; sense of weight, accompanied with pain in the region of the heart: palpitation excited by the slightest movement, and general muscular soreness over the whole body. When first seen by Dr. Cormack, the pain in her teeth was excessive; but no appearance of caries; the gums, especially of the lower jaw, were swollen, painful, and spongy, and bled on the slightest touch. even the attempt to swallow caused an oozing of blood. On examining the mouth, he found the gums as described; the teeth loose and extremely painful; the fauces and mouth inflamed and ulcerated in white patches. the tongue flabby and thickly loaded with white fur; the breath horribly fetid; great difficulty in swallowing; pulse 130, small and feeble, muscular pains excruciating; joints swollen and very painful; the skin over the whole body tense, tumefied, and of a preternaturally dark colour; vibices scattered over the limbs; great prostration and despondency; constant involuntary sighing; face and head enormously swollen; countenance pallid and unmeaning; no sleep, from the pains of the joints; the bowels obstinately constipated for several days; the evacuations caused by a dose of senna and salts brought on extreme exhaustion and several fainting fits in rapid succession; the urine was scanty and high coloured; the belly hard and dropsical; heat of skin intense. The two teeth in which the pain commenced were split in two perpendicularly. Dr. M'Cormack says he failed in producing other than mere temporary relief. Another, but a milder case, occurred in Dr. M'Cormack's practice. The patient was a very delicate female, aged nineteen, exposed to cold, hardship, great fatigue, and want of proper nourishment. She was attacked 30th of March with sudden prostration of strength, fainting, acute pain in the abdomen, excruciating muscular and articular pains, especially attacking the neck, shoulders, and back; the skin so sore that the slightest touch caused her to roar out. She was unable even to turn in the bed; bowels confined; urine scanty and high coloured; pulse 130, small and feeble; great heat of skin; tongue loaded; breath fetid; face and head enormously swollen, flushed several times in the day, and pallid afterwards; great despondency, amounting to a certainty of death; headache. She continued in this state till April 4th, when she complained of her teeth being so loose she could not eat; the

mouth sore, gums spongy, and bled on the slightest touch. She is, up to this date, 6th, improving gradually under a generous diet, with bitters, such as quinine, comp. decoct. gentian, &c. The gums are still sore; had not taken one grain of mercury in all her life; the muscular and articular pains still continue, with extreme debility. Dr. M'Cormack then proceeds to give extracts from two papers published in the "Transactions of the Medical and Physical Society of Calcutta," by Drs. Macnab and Ross, showing that a similar disease had prevailed among the sepoys, from bad and insufficient diet. Dr. Macnab, in describing the disease, says the invasion and course of this malady were by no means remarkable for their uniformity; there was a variety in the incipient as well as in the consecutive symptoms. Sometimes one single symptom first manifested itself, and continued to increase steadily for some time before any other supervened (such as ulceration in the gums); at other times, pains and swellings in the extremities were the earliest in the field, and would precede, perhaps by a fortnight, any degeneration in the gums, which would attract notice only after considerable suffering and bodily emaciation; whilst many cases, at the commencement and long after, were extremely ambiguous, and not accompanied, until late in the disease, by any of those marked evidences which distinguished the true nature of the illness. In such cases, the patients complained of excruciating pains in one or more of the extremities, perhaps with little or no swelling, and so closely simulating rheumatism, that in some instances the distinction could not be well established. The following was, perhaps the more regular succession of symptoms. For the first few days the patient felt some soreness in the gums, which might be seen to push up, puffy and congested, between the incisor teeth. There was languor, and perhaps a paroxysm or two of fever, or, at times, regular evening accessions. Day after day the blunt projecting edges of the gums grew more prominent, became more soft, and soon assumed a spongy, hemorrhagic character; the fauces, tongue, and mouth got pallid, and the breath emitted a heavy feculent odour. The pulse increased in frequency throughout the day; irritative fever set in; tormenting pains were developed in the muscular portions (more rarely in the tendinous) of some one or more extremities, such as the leg, arm, or thigh, seldom in more than one member, unless when the cases were of considerable aggravation. These sites became tumefied, exceedingly tense, non-elastic, and over them a colour preternaturally dark. They were more or less diffused, sometimes occupying the whole circumference of the limb, as the leg from the knee to the ankle, which would have a shining polished appearance; vibices occasionally came out in other places, without pain or swelling. In this state the patient's flesh, and strength wasted rapidly—the teeth imbedded in the flabby vegetating gums felt loose, and were unfit for mastication. Horid fetor now proceeded from the mouth, despondency took active possession of the mind. There was no sleep from intense suffering, nor was there any appetite. Blotches frequently occupied the thighs and hips, but occasioned little or no inconvenience. These were of a lighter colour, and of a slightly reddish tinge, or flesh-coloured. Neither the one or the other ever lapsed into ulceration. Sometimes discharges of blood to considerable amount took place from the nose, never from other cavities. From the gums very slight irritation brought blood, in some cases very copiously, at all times to some extent. In proportion as the complaint put on a milder aspect, and became less prevalent, the mouth was much less the seat of disease; in many not at all, the only symptoms being the pains and swelling in the extremities so often mentioned, as prominent symptoms throughout. The secretions in most cases were not materially altered. Seldom was there any constipation, neither were the bowels much relaxed, unless medicine happened to be administered with too free a hand, in which case they might become troublesome. The urine was always high-coloured, and very odorous. The symptoms as described by Dr. Ross bear a near resemblance to those just narrated, and need not be transcribed. The disease previously noticed by Dr. O'Brien as a peculiar form of gastro-enteritis caused by the use of diseased potatoes (see *Medical Times* ante), Dr. M'Cormack regards as a modified form of land scurvy. The only symptom not mentioned by Dr. O'Brien seems to be the swollen, spongy state of the gums—a condition stated by Dr. Macnab to be of less frequent occurrence in the milder form of the disease. Change of air and scene seems to have been the most effectual remedy in treating this disease in India. The remedies that were employed were nitrated vinegar, madar, preparations of iron, mineral acids in conjunction with bitters, such as cinchona, chyraetta, wine, beer; blood-letting in two cases where the patients were robust. The local pains, which constituted a very serious and harassing symptom, were only temporarily alleviated by sinapisms, blisters, fomentations, leeching; washes of all kinds were employed for the mouth without any permanent benefit.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

BY G. J. GUTHRIE, F.R.S., &c.

LECTURE IV.

Wounds and injuries of the axillary artery; Results of ligature of the subclavian artery; Great fatality of the operation; Mr. Keate's case of ligature of the subclavian, below the clavicle, for axillary aneurism, following a gun-shot wound; Mr. Chamberlaine's case of ligature of the subclavian, below the clavicle, for axillary aneurism, the result of a wound from a cutlass; Case of immediately fatal wound of the axillary artery from a musket-ball; Case of sabre-cut, dividing the pectoral muscle; Case of wound of the axillary artery, and ligature of the injured vessel; Delpech's case of wound and ligature of the brachial artery, followed by secondary hemorrhage from the irritation caused by the ligature d'attente; *ligature of the axillary or subclavian, suppuration under the pectoralis major, and death; M. Galtié's case of ligature of the subclavian above the clavicle, for secondary hemorrhage after amputation at the shoulder-joint; Treatment of hospital gangrene by the actual and potential cautery; Larrey's case of presumed wound of the subclavian artery and vein; recovery without operation; Delpech's case of wound of the carotid; recovery without operation; Elasticity and resistance of arteries to injuries; Larrey's case of sword-wound of the ulnar artery, cured by compression; formation of an aneurism, ligature of the brachial, opening of the aneurismal sac, and ligature of the interosseous artery; Catanoso's case of wound of the axillary artery; ligature of the subclavian below the clavicle; extensive suppuration; enlargement of the wound, and treatment by compression; Montanini's case of ligature of the axillary for false aneurism caused by a wound; Dupuytren's case of ligature of the subclavian, above the clavicle, for an aneurism of the axillary artery following a wound; Lallemand's case of ligature of the subclavian, above the clavicle, for diffused aneurism of the axillary artery following a wound of that vessel; extensive suppuration of the sac; Professor Blasius' case of wound of the arm-pit by a sword; ligature of the subclavian, terminating fatally; Dr. Mouteath's case of ligature of the axillary artery for diffused aneurism, the result of an injury; Messrs. Maunoir's case of ligature of the wounded axillary artery; Desault's case of ligature of the wounded axillary artery; Dr. Segond's case of ligature of the subclavian above the clavicle for a wound of the axillary artery; Dr. Nott's case of ligature of the subclavian, above the clavicle, for secondary hemorrhage following sloughing in the axilla; Mr. White's case of ligature of the subclavian above the clavicle, for a circumscribed aneurism of the axillary artery following a wound of that vessel; Dr. Buchanan's case of ligature of the right subclavian for secondary hemorrhage from the brachial artery; Dr. Gibson's case of ligature of the subclavian, above the clavicle, for an aneurism in the axilla, from external injury without a wound; Dr. Warren's case of ligature of the subclavian, above the clavicle, for rupture of the axillary artery from violence; Injury of arteries from cannon-shot; Mr. Stanley's case of rupture of the inner and middle coats of the brachial artery from external violence; Sir C. Bell's case of lacerated wound of the axillary artery from machinery; Dr. Post's case of ligature of the subclavian, above the clavicle, for secondary hemorrhage after amputation at the shoulder-joint; M. Haspel's case of ligature of the subclavian, below the clavicle, for a wound of the axillary artery; Question of amputation at the shoulder-joint in such cases; Case of wound of the brachial artery, cured by compression; M. Haspel's case of wound of the brachial artery, and ligature of both ends of that vessel at the seat of injury; Mr. Syme's case of rupture of the axillary artery from external violence; formation of a diffused aneurism, followed by amputation at the shoulder joint; Dr. Mackenzie's case of injury of the axillary artery from a wound with a red-hot poker, and ligature of the subclavian above the clavicle; Remarks on the practice of applying a ligature on the subclavian, above the clavicle, for wounds of the axillary artery.*

The axillary artery has not fared better in many instances, than the posterior, tibial, and peroneal arteries. The same dread of dividing muscular fibres has overcome all other considerations, and instead of placing two ligatures on the part of the vessel actually injured, one above, the other below the wound, the subclavian artery has been tied at a distance from the injury, sometimes below, sometimes above the clavicle, oftentimes to the destruction of the patient, and always, even when successful, in defiance of the theory on which such proceeding is founded.

Dr. Norris, of Pennsylvania, has collected and published, in the 10th vol. of the *American Journal of the Medical Sciences*, for 1845, the results of sixty-nine operations performed on the subclavian artery, either above or below the clavicle. Of the sixty-nine cases, thirty six recovered, and thirty-three died. This may be considered as one and one—a result that should cause every surgeon to pause and think again and again before he resorts to an operation, if it can by any possibility be avoided, which may be considered so deadly as to fail in thirty three cases out of sixty-nine. It is his duty to satisfy his mind on running such a risk, that no other operation is likely to be less fatal.

Of the sixty-nine cases, seventeen were done in consequence of wounds of the axillary artery, and of these nine recovered, seven died, and one failed to arrest the bleeding, which was only effected by amputating the arm at the shoulder-joint; eight failures against nine recoveries; eight out of seventeen is in the proportion of thirty-two against thirty six, the average of the whole sixty-nine being thirty-three against thirty-six.

In the seventeen cases collected by Dr. Norris, the operations were done by Messrs. Chamberlaine, Baroni, Galtié, Gibson, Buchanan, Lallemand, Segond, Blasius, Haspel, Catanoso, Montanini, Syme, White, Nott, Hutin, McDougal, and Mott. M. Berard says that in twelve cases he is acquainted with, three only were successful, but this is certainly more than the average mortality.

The object of these remarks is to show that the operation on the subclavian artery is always a fearful one, and the deaths do not seem to depend on the soundness or unsoundness of the artery itself; the mortality being equally great in cases of wounded, as of diseased axillary arteries. It may therefore be safely concluded that the danger lies in the operation, and that it should not be performed when another can be substituted for it, unless that other can be shown to be equally dangerous, when the selection becomes a matter of chance, as far as the life of the patient depends. The operation on the axillary artery itself at the part injured, in all cases of wounds, and in all cases of recent circumscribed or diffused aneurismal swellings, the consequence of wounds, is the substitute which ought in all cases to supersede it. It is an operation founded on principle, which the other is not, and which I

affirm and believe will be found infinitely less deadly.

CASE 55.—The first instance on record of the subclavian artery being included in a ligature, is that in which the late Mr. Keate, surgeon-general to the forces, applied it below the clavicle, in the York Hospital, Chelsea, in a case of axillary aneurism formed after a gunshot wound, of some months' standing, which had burst. Mr. Keate, after dividing the pectoral muscle in the course of its fibres, dipped down twice with a needle and thread, and the second time secured the artery. I was present at the operation, and assisted the late Mr. Carpue in taking care of the man afterwards, who recovered. I was too young to know any thing about the matter, and too much in awe of the surgeon-general to suppose for a moment that any thing he did was wrong. I have however often since thought of the two dips of his needle, and have even ventured to think that the patient was as fortunate in his escape from his doctor as from his disease.

CASE 56.—Mr. Chamberlaine, of Jamaica, placed a ligature on the artery below the clavicle, in 1814, on account of an aneurism which had formed in the axilla, in consequence of a wound received from the point of a cutlass, which bled profusely, and healed in three days, leaving a scarcely perceptible cicatrix. The tumour was as large as an orange; the pulsation very strong; the pain from pressure on the nerves very distressing; there was no œdema of the arm; no elevation of the clavicle. The pulsation in the radial artery was not so firm as in that of the other side, and before the operation was becoming indistinct. The integuments over and above the aneurism were perfectly healthy in appearance. On the 17th of January, eighteen weeks and three days after the accident, a ligature was applied below the clavicle, in the first part of the course of the artery, and the patient recovered.

Remarks.—This was the operation of Anel done below the clavicle, and as the complaint was of eighteen weeks' standing, circumscribed, and with little pulsation in the radial artery, the operation was admissible, especially because an aneurismal sac had formed. I am, however, of opinion that if twenty patients were so operated on, and in twenty more the sac were laid open, and the artery secured above and below the wound, that more would escape with life and limb by the latter than by the former operation.

CASE 57.—A soldier was wounded on the heights of Oporto by a musket-ball, which passed through the pectoral muscle, in the direction of the axillary artery, and went out behind. I saw him just as he expired from loss of blood, and immediately divided the pectoral muscle to see what injury had been done to the artery. The ball had cut it nearly half across, it could neither contract nor retract, and the man had bled to death. If I had been in time to stop the bleeding, and had tied the subclavian artery, above or below the clavicle, the bleeding would have returned, and the man would have been lost, as the wounds of the integuments could not unite, so as to allow of the formation of a spurious circumscribed swelling. The artery could have been secured at the spot wounded with the greatest ease

CASE 58.—A French soldier at Salamanca received a sabre cut vertically and directly across the pectoral muscle, opening into the axilla, and exposing the vessels and nerves. He was afterwards ridden over and taken prisoner by the heavy German cavalry. The wound was always considered a simple one, and healed without difficulty.

CASE 59.—A French soldier, at the battle of Salamanca, received a shot through his chest, and another through the axilla, which bled at the end of several days. I divided the pectoral muscle, and placed two ligatures on the cut artery above the origin of the subscapularis. The hemorrhage was suppressed, but the man died of the injury to the chest.

CASE 60.—Delpech, in the case of a soldier who had been wounded in the south of France, in 1814, tied the brachial artery, as dissection afterwards proved, two inches below the subscapular branch, by an incision carried high up into the arm-pit; and according to the opinions of that day in France, he introduced a ligature under the artery an inch higher up, but which he left loose ready to tighten when necessary. On the ninth day afterwards bleeding took place, and, to his great surprise, he found on trying to tighten the loose ligature that it came through the parts, and had been the cause of ulceration of the artery and of the bleeding. He immediately made an incision two inches and a-half long through the inguments into the wound, in a line between the pectoral and deltoid muscles having then exposed the pectoralis minor, he divided it near its insertion into the coracoid process of the scapula. The axillary or subclavian artery was then seen, and tied, as it is about to pass between the two roots of the median nerve. This operation was so far successful; matter formed however under the great pectoral muscle and neighbouring parts, and the patient sank on the tenth day under his sufferings.

Remarks.—If Delpech had cut through the pectoralis major muscle, he would have left me nothing to suggest, and would have given such free vent to the matter formed under it, and in the axilla, that his patient would, in all probability, have been spared the irritation which caused his death.

CASE 61.—M. Galtié, Delpech's assistant in the Hospital St. Eloi, at Montpellier, tied the subclavian artery above the clavicle, in consequence of hemorrhage taking place from the stump after amputation at the shoulder-joint. The patient died on the third day, exhausted. The opening in the artery was between the ligature on the stump and that on the subclavian, and had been occasioned, it was supposed, by hospital gangrene.

Remarks.—M. Galtié would have given his patient a better chance for life, if he had divided the pectoral muscle, looked the opening in the artery fairly in the face, placed a ligature above and below the wound, and then cauterised all the parts affected by hospital gangrene with a red-hot iron.

When the British wounded had left Toulouse, I visited Montpelier, and was received by M. Delpech, and the physicians and surgeons of the university, and of the Hospital St. Eloi, with the greatest courtesy. Delpech was then in the habit of cauterising all the cases of hospital gangrene with irons at a white heat, with the greatest success. I mentioned to him that we had gained similar good effects from the potential as he had obtained from the actual cautery, and especially from the use of arsenic, potassâ fusâ and the mineral acids in all cases of hospital gangrene and sloughing ulcers. Delpech, in his work on Hospital Gangrene, mentions this fact, and although I do not desire to be considered as the proposer of destructive measures for the cure of sloughing ulcers, I may without impropriety, claim to be the proposer or person who first recommended the use of the nitric and muriatic acids in such complaints. They were used liberally and effectively at Brussels and at Antwerp, and are after all, with the red-hot iron the remedies to be principally depended upon in this complaint, pure or diluted as the exigencies of the case may require.

Hospital gangrene often gave rise to hemorrhage, which led in the Peninsula to securing the vessels, sometimes near, sometimes at a distance from the part affected. I have tied the external iliac, the femoral, popliteal, humeral, radial, ulnar, posterior, and anterior tibial arteries, in consequence of their being opened by this disease. Most of these cases were lost, from the extension of the gangrene to the wound made by the operation, until the local destructive measures alluded to were adopted to arrest its progress. The last case on which I operated at Santander, after the battle of Vitoria, succeeded. It was on the anterior tibial artery.

On my way to England I visited Paris. The Baron Larrey received me with open arms, and took me to his hospital at the Invalides. There he heated his irons, and applied them very vigorously to a large ill-conditioned ulcer on the right hip of a French soldier, who could not refrain from a howl that would have done honour to any gentleman whatsoever. The Baron stopped for a moment, looked in the man's face, and said, "Vous êtes de la garde," and then proceeded with his irons. The soldier uttered not another word.

CASE 62.—Pierre Cadrieux, aged thirty-two, received a wound, in November, 1811, from the point of a sword, which passed in a direction backwards, downwards, and outwards, from immediately above the clavicle, dividing the outer part of the sterno-cleido-mastoideus muscle, and of the scalenus anticus muscle, and opening into or cutting across, as was presumed, the subclavian artery and vein, as they are becoming axillary or passing over the first rib. The bleeding was terrific, and the man fainted and remained as if dead. A compress was applied, and he was brought to the Hospital of Gros Caillou, and placed under the care of Baron Larrey. The next morning he looked like death, and could hardly speak; the wound, which was somewhat more than half an inch long, did not bleed; a swelling had formed above and below the clavicle, pulsating more strongly above. A peculiar thrilling sound could be felt and heard deeply in the direction of the axillary vein; the arm was cold, insensible, and without pulsation in any of its arteries, not even the axillary. The wound was treated by compress and bandage, the arm with warm camphorated fomentations; the patient being supported by wine and good soup, gradually recovered, and as some excitement followed the next day he was bled, and cold was applied to the swelling. Under this careful treatment the wound healed on the eighth day, and the patient gained strength and gradually recovered the use of the arm. On the twentieth day, the aneurismal swelling had disappeared, but the thrill remained, with the pulsations of the vein of the neck, which pulsation never became perceptible in the arm. On the fifty-fifth day some slight pulsations could be felt in the arteries of the arm, and the thrill in the vein had diminished. In 1815 the Baron again saw P. Cadrieux, and found to his astonishment that no pulsation could be distinguished in the axillary, radial, or ulnar artery. A change had taken place in the circulation of the limb, which preserved nevertheless, its warmth and sensibility, although the fingers were drawn forcibly into the hand, from the brachial plexus of nerves having been also injured.

CASE 63.—Delpech, in a nearly similar case of wound, in which he believed the common carotid was wounded near its origin, and which was followed by a terrific hemorrhage which almost destroyed the patient, acted in a similar manner, and with the same successful result.

Remarks.—These two cases show the propriety of that rule I have endeavoured to establish of letting large arteries alone until they bleed and demand attention. There can be little doubt that if Larrey and Delpech had tried to perform operations on these arteries they would have lost their patients. It is time enough to put men's lives in jeopardy when the necessity for doing something is manifest. Formidable operations are not to be done on the speculation that they may be required, and this should never be forgotten, for there are several cases on record in which the main trunk of a limb has been supposed to be divided, when, in fact, trifling branches only have been injured.

An artery possesses an elastic and resisting power which enables it to yield in a great degree to an opposing force without being torn, and to suffer a degree of contusion which would lead to sloughing in other parts with little comparative injury.

I published the case of Captain Flack in my work on Gunshot Wounds, page 330, in which several inches of the femoral artery were laid bare by a cannon shot, and were seen for three weeks pulsating in the usual manner, until gradually covered over by granulations. In this case the artery maintained its life and functions unimpaired.

At the battle of Albuhera, Captain Gibbons, of the fusiliers, was wounded by a musket ball, which entered immediately below the clavicle, and passed out behind, so directly in the situation of the axillary artery, that it was supposed it must be injured. Great inflammation followed in the chest, and his life was saved with difficulty. He died of phthisis in 1829; and on examining him particularly, I found that the artery was obliterated at the part where the ball had passed by the side of it. I have seen, however, many instances in which no such event followed. The late General Sir Lowry Cole, was wounded when advancing with the 4th division of infantry to attack the French centre at the battle of Salamanca. The ball passed under the clavicle, injured the first rib close to the artery, and passed out behind, without implicating the

artery or giving rise to any inconvenience, further than a diminution of the force and size of the artery at the wrist when compared with the other. At the first siege of Badajos, two officers of the 40th regiment met with injuries nearly similar; and I have seen the subclavian artery as well as the carotid fairly divided; but then death immediately ensued. The fact of arteries yielding a passage to a ball, and re covering themselves and their situation without rupture or sloughing, is well shown in case No. 24, of Turnbull, and is I believe sufficiently established to require no further confirmation.

CASE 64.—L. B., twenty years of age. In Sept., 1811, was wounded by the point of a sword in the right arm, which opened the ulnar artery. The bleeding was arrested by compression, and the wound healed in twenty days. Shortly afterwards a small tumour of an ovoid form appeared under the cicatrix of the wound, which, in the course of a few months, attained the size of a man's first. Larrey tied the brachial artery in the arm above the tumour, and afterwards laid open the aneurismal sac, which was full of layers of fibrous coagula he had some difficulty in detaching; he then sought for the upper and lower ends of the artery, which he thought had been divided and separated by the sword; this had not however happened, but the artery at the wounded part had become dilated, the portion immediately above being funnel-shaped or dilated in that form, the lower end being on the other hand, obliterated; between these two points the inter-osseous artery entered the sac, and bled so freely as to require a ligature being passed around it underneath the sac. The ligature on the brachial artery came away on the ninth day, that on the interosseous artery on the eleventh, and the patient was cured in six weeks.

Remarks.—If the Baron had been contented with his first ligature, his patient would have been well in half the time, and with less than half the suffering. By opening the sac he placed an aneurism of some months' standing in the state of a wounded artery, and had to tie a vessel with a good deal of difficulty, which never should have been exposed.

CASE 65.—Catanoso, of Messina, in September, 1835, was called to a man with a wound in the arm-pit, which oozed blood frequently until the fourteenth day, when an alarming hemorrhage caused him to place a ligature on the artery, below the clavicle, which he found it very difficult to do. The wound did not heal by the first intention, but suppurated, and discharged a quantity of sanious and offensive pus mingled with coagulated blood. It was therefore enlarged to give free vent to the discharge. On the nineteenth day after the operation, arterial hemorrhage took place. The clots being removed, the hollow whence the blood proceeded was filled with resin and charcoal, gum arabic, retained by compresses and a tight bandage. The hemorrhage did not return, but the cure took some months to complete.

Remarks.—If the operator had divided the an terior fold of the arm-pit by a perpendicular incision, and placed one ligature above and another below the wound in the artery, his patient would not have had in all probability secondary hemorrhage, and would have been cured in half the time, and with much less risk.

CASE 66.—Montanini, of Naples, tied the axillary artery below the clavicle, sixteen days after the accident, in a case of wound which healed early, and allowed an aneurismal tumour to form the size of the fist. Six days afterwards the tumour burst, and about five ounces of coagula were discharged. The sac suppurated, but no bleeding took place. An abscess formed under the pectoral muscle, requiring to be opened. The patient was cured in thirty-six days.

Remarks.—The inflammation of the sac which led to its rupture on the sixth day, closed the axillary artery below in all probability, or the patient would have bled to death, unless another operation had been performed to tie it also.

CASE 67.—C. Chevalier, aged thirty-seven, was wounded, in 1811, in Spain, by a thrust with a sword on the back of the shoulder, which caused him to faint after a great loss of blood. The wound healed in three weeks. Two months afterwards he perceived a small tumour in the axilla, about the size of a nut, and pulsating. Two years afterwards it was as large as a hen's egg, and after some laborious exertions it rapidly attained the size of a child's head. M. Dupuytren tied the artery above the clavicle, between the two scaleni muscles, the anterior of which was divided; the man escaped, and at the end of several months resumed his occupation of a joiner, and enjoyed good health for three years. The tumour did not entirely disappear, for after a great exertion, inflammation and pain came on in the axilla, and he applied at the Hotel Dieu again in 1822. At the end of a fortnight it suppurated, burst, and discharged a large quantity of matter, having the colour and consistence of pounded raisins. The opening was enlarged, the sac injected, and he left the hospital, cured, in three months.

Remarks.—This was an aneurism formed after the manner supposed in cases 55 and 56. Being of long standing, the ligature of the subclavian above the clavicle was admissible, but there can be no doubt that this man would have run less risk if the sac had been laid open when of the size of a hen's egg.

CASE 68.—Lallemand of Montpellier (*Archives Generales de Medecine* vol. vii.), was called to a young man who was wounded by the point of a sword through the middle of the anterior fold of the arm-pit, and lost a good deal of blood at the time; but as the small wound became obstructed, the blood only oozed out; a large effusion, however, took place into the armpit, and into the cellular membrane of the chest, arm, and neck. M. Lallemand with great difficulty tied the subclavian artery above the clavicle. On the twelfth day the ligature separated, but the diffused aneurismal tumour became large and more painful; fluctuation being manifest, a puncture was made into it, and an enormous quantity of chocolate coloured matter was evacuated, together with many large black lumps of coagulated blood. The day after another swelling required another puncture, for the evacuation of a further quantity of fetid pus, with sloughing cellular membrane, &c. A third abscess formed, and required another puncture, followed by similar results. A month after the operation the pulse returned in the radial artery, eight days after in the ulnar, and the patient ultimately recovered.

Remarks.—If an incision had been made at first, through the anterior fold of the arm-pit, the coagulated blood would have been readily evacuated, the wounded artery would have been tied, and the patient cured without difficulty. If the collateral circulation had been early established, this operation would have been necessary to stop the bleeding which would have taken place. This man had a lucky escape from his accident and his operation.

CASE 69.—It is stated in vol. xxx of the *Med. Chir. Review* that a young man was brought to Professor Blasius, of Hallé, with a wound through the posterior fold of the arm-pit from a sword; he bled profusely and on several occasions. On the twentieth day after the accident, Professor Blasius tied the subclavian below the clavicle, and the patient died from exhaustion two days after. On dissection the axillary and vein were found uninjured; the bleeding had taken place from the circumflexa humeri posterior and circumflexa scapulæ arteries. Dr. Blasius condemned in severe terms the negligence of not laying bare the artery or arteries wounded, and applying a ligature to them.

Remarks.—It is plain that if these arteries are of any use in the collateral circulation, bleeding must be renewed by them, after the subclavian has been tied above their origin, unless they should be accidentally closed in the interval. I need not add to the forcible criticism of Blasius, which is unanswerable. In this, as well as in Case 67, the posterior fold of the arm-pit might have required to be divided instead of the anterior.

CASE 70.—Dr. Monteath, of Glasgow, was called to a gentleman on the 20th of September, 1813, whose right arm had been run over by a heavy coach, about its middle, and bruised from the shoulder to the wrist without lacerating the skin. Great inflammation ensued, followed by suppuration, the matter being evacuated by an incision over the biceps muscle, twelve days after the accident. This was followed by great sloughing of the integuments, and on the twentieth day by hemorrhage inducing syncope. Hemorrhage again took place, and some operation to arrest it was necessary. The gangrene had extended close to the boundaries of the axilla, and the axillary artery was, therefore, secured by ligature as high up as it could be got at by an incision at the arm-pit, under the anterior fold made by the pectoral muscle, and, as Dr. Monteath believes, above the origin of the subscapularis and circumflex arteries. The patient recovered with an arm, after a time, "in all respects perfect."

The Messrs. Maunoir of Geneva, performed nearly a similar operation, after a sword-wound, with success. Desault, Langenbeck, and Roux, have each recommended the division of the pectoral muscle for this purpose, and if Desault had been better acquainted with the management of the ligature, success would have attended his efforts, and he would have left me nothing to propose, but to follow the example he had set in 1795, in the following case.

CASE 71.—The point of a sword passed through the pectoral muscle, an inch above its lower edge; a great quantity of blood was lost, and a large swelling formed in the axilla, between the folds of the arm-pit. Seven days afterwards the man was admitted into the Hôtel Dieu. An incision was made in the course of the axillary artery, commencing below the clavicle. The two lower thirds of the pectoral muscle were divided, and the coagulated blood removed from the axilla, so as to expose the artery, veins, and nerves. So far the proceeding of Desault was to be applauded. He then included all the vessels and nerves in one mass by a temporary ligature. The artery was then separated, and tied separately immediately above the origin of the circumflex and subscapular arteries. The temporary ligature was then loosened, but was not removed. No more ligatures were then applied below the wound in the artery. The man died six days afterwards of mortification.

Remarks.—If in this case Desault had placed two ligatures on the artery, one above and the other below the wound in it, instead of four, without fear of being unable to command the bleeding, his patient would, in all probability, have recovered.

CASE 72.—Dr. Segond, in French Guiana, in April, 1834, was called to a wound of the axillary artery in a negress, which took place by a fall in February. The fourth or fifth day after the accident she lost a great quantity of blood; at the end of a month she seemed nearly well, with the exception of a small abscess, from which a little bloody discharge took place, and in which an aneurismal tumour had formed. The subclavian above the clavicle was tied, and the patient recovered very fortunately.

CASE 73.—Dr. Nott, of Alabama, U. S., was sent for to C. Clausel, aged thirty, shot through the wrist and axilla by small shot on the 27th of August. The wrist was amputated. A slough formed in the axilla. On the twelfth day hemorrhage took place to the extent of two pints, returned on the thirteenth, and again on the sixteenth; it was arrested by compression. On the eighteenth day the slough separated, leaving a large cavity in which the artery could not be felt. By the middle of October the cavity had filled up, and the ulcer had nearly healed, when an aneurismal tumour began to form and gradually extended up to the clavicle. On the 29th of November a ligature was placed on the artery above the clavicle. On the thirty-first day this came away, having been so tightly tied that an ordinary sized pea could hardly be passed through the noose after it came away. On the fortieth the wound had healed, but the pulsation which had returned on the second day after the operation was still strong and the *purr* distinct. These had a little diminished in five months, and the patient was found to be cured two years afterwards.

CASE 74.—Mr. White, of the U. S., tied the subclavian above the clavicle, in September, 1838, for a wound of the axillary artery, which had formed a circumscribed aneurism likely to burst. The operation succeeded.

CASE 75.—Dr. Buchanan relates a case in the third volume of the *Glasgow Medical Journal*, in 1830, page 283, in which he tied the subclavian artery of the right side in consequence of hemor-

rhage from the brachial artery, the result of th separation of mortified parts after a severe injury. The man died five days after the operation. Th post-mortem report says, after the parts had bee dissected, and the scalenus anticus muscle had been cut and turned aside, "the subclavian artery wa well seen with the ligature firmly tied round it, and a hard clot of blood perceptible on its cardiac side The clavicle was now removed, and the axillar artery traced under the pectoralis, onwards to its termination in the stump, during which transit it seemed quite healthy, till about an inch below the axilla, when it assumed a soft, greenish appearance and no clot could be discovered on the distal side o the ligature. The muscles surrounding the shoulder joint were soft, green, and matted together, and a large collection of fetid pus extended from the slough below the axilla, to the under surface of the pectoralis major and minor, the whole substance of which last was in the same gangrenous state as the muscle of the shoulder-joint.

Remarks.—Dr. Buchanan justly attributes the immediate cause of death to mortification of the extremity, but he does not seem to consider that its continuance and extension were at least maintained and encouraged, if not rendered inevitably destructive, by his having *cut off* the supply of blood around the shoulder, by tying the subclavian artery above the clavicle. This he did, because he supposed the operation of tying the artery under the pectoralis major and minor to be an operation which had never been done, and says, "Further, I am of opinion it never ought to be had recourse to." Thi was Dr Buchanan's error. The very simple operation of dividing the integuments and pectoralis major muscle from a little below the clavicle into the axilla would have exposed the artery, which it will be seen from the dissection report was quite healthy, even for an inch below the axilla. Thi incision was also necessary, if for the purpose only of giving a free vent to the matter collected under the pectoralis major and minor and around the shoulder-joint. It would have tended to arrest the sloughing process, and the arm, having the advantage of the collateral branches which were cut off by tying the subclavian, might not have been lost. It is possible the man might not have died.

I have stated that the principal trunk of an artery may be injured by internal and by external violence without any wound of the integuments, of which the following cases are examples :—

CASE 76.—Dr. Gibson, of Pensylvannia, after reducing an old dislocation of the head of the humerus of ten weeks' standing, on 15th of March, 1828, which occupied one hour and a half, discovered the next day that an aneurismal tumour had formed in the axilla; and on the 17th he tied the subclavian artery above the clavicle; mortification of the hand and arm followed, and the man died on the 23rd. On dissection it was found that a small aneurismal sac had been ruptured, and which it was supposed might have existed from the period of the accident.

CASE 77 James A , aged about thirty, on the evening of December 23rd, 1843, while in a state of intoxication, slipped on ice, fell, and struck his left shoulder against the kerb-stone of the side walk. Violent efforts were made to reduce the dislocation, but in what manner the patient could not tell, excepting that he thought one person placed his foot with a boot on, in the axilla. He was sent to the hospital, and on the next day was seen by Dr. Warren, who found the left arm and shoulder much swollen. Leeches and cold applications were employed, and on the following day the swelling was so much reduced as to enable him to decide that no dislocation existed. During the night of the third day following (December 28th), the patient was seized with a violent fit of coughing, during which he felt something give way in his shoulder. The next morn the shoulder and arm were very much discoloured and enlarged; the arm was painful, and the pat [illegible] prostrated. On the 30th it was discovered that the man had no pulse in his left wrist, or in any [illegible] of the arm, and he had also lost both feeling [illegible] motion in the extremity. The swelling incr[illegible] until it became enormous, the [illegible] in the axilla. A vesication was [illegible] on the back of the forearm. January 27th, 1844, an abscess was found to be forming in the axilla. In seven days it pointed, but did not ope till February 4th, when it discharged a coagulum, and about a pint of fluid dark-coloured blood. Three days subsequently, at six o'clock in the morning, a sudden gush took place from the wound, b which the bed was inundated, the mattresses soaked, and the blood poured upon the floor. Exhausted and almost lifeless, he sunk into a state syncope, and the hemorrhage ceased. As he was too low to undergo any operation, it was agree that if he lived till the next day, the subclavian should, if possible, be tied. By the next morning he had much revived. At ten o'clock he took eighty drops of the tincture of opium, and at eleven was carried into the operating theatre.

A great difficulty presented itself in the outset o the operation, the swelling of the shoulder, the tumor in the axilla, and the natural shortness of the neck almost obliterating the space between th shoulder and lower jaw. Dr. Warren, after minutely detailing the steps of the operation, state that the aneurism-needle was passed under the first dorsal nerve, which was mistaken for the artery. The wound was too deep, too narrow, and consequently too dark, to permit the artery to be visible The anterior scalenus was partially visible, and, passing the forefinger of the hand to the edge o this, a good portion of the muscle was divided by the probe-pointed bistoury, introduced upon th finger. The subclavian artery then became quite sensible to the touch, and slightly distinguishable by the eye. A long aneurism-needle was passe under the artery, and at this moment a sligh whistling was heard, and the author was satisfie that some air had entered the thorax. The ligatur was tied, and the wound closed.

The patient improved after the operation. On February 22nd, the thirteenth day, the ligature wa removed. On the 29th, a stream of blood was seen to issue from the unclosed part of the wound; th blood lost amounted to about a pint, did not issue per saltum, and was of a venous colour. The hemorrhage was arrested by pressure. At the commencement of March, he had an attack of pneumonia confined to the lower lobe of the left lung, and also a second attack about the 1st of May. By the 1st of October, the swelling had disappeared from th arm, and motion had returned in the shoulder oint. The large excavation in the axilla was reduced to a fistulous tube. On February 4th, thre hundred and sixty-one days after the operation, Dr. Warren was able, for the first time, to detect a dis nct pulsation in the radial artery, and subsequently one of an indistinct character in the ulnar and brachial. The patient, June 15th, had nearly covered. There were still fistulous openings in he neck and axilla. Sensation and motion were slowly improving.

Dr. Warren remarks, that the cause of the rupture of the subclavian artery in this case is involved n some obscurity. The probability seems to b hat great violence was employed in the attempt to educe the bone, and that the arteries and nerves were contused by strong pressure of the operator's oot, combined with the forcible extension of the rm. The vessel did not rupture immediately, ecause its coats were contused, and not torn sunder, but a separation of the contused parts ook place, in consequence of the violent efforts of coughing, on the fifth day after the accident.

Remarks.—I have had the pleasure of making the acquaintance of Drs. Gibson and Warren, of whose private character and professional attainments it is impossible for me to think too highly. They are universally acknowledged. I am therefore the more willing to express my dissent from the principle on which they acted in these instances. In Dr. Gibson's case the mortification which ensued fter the operation might not have occurred if the aneurismal tumour had been opened, and the artery had been secured above and below the part injured; for I consider the mischief to have arisen from an an injury, and not from disease of the artery. If Dr Warren had cut across the integuments and the pectoral muscle in his case, and laid open the tumor in the whole of its extent, he would have been able to see the torn or even ulcerated part of the artery whence the bleeding came; for as the vessel was injured by the heel of the boot of the person who reduced the dislocation, provided there had been one, the artery must have been injured in the third or last part of its course before it becomes humeral, and the patient would in all probability have been perfectly well in two months, even if it should have been subsequently necessary to have placed a ligature on the lower end of the divided vessel, that is, the upper end of the humeral artery. The man nearly lost his life on the 29th of February from hemorrhage of a venous character, caused by the operation on the subclavian artery, which danger need not have been incurred, and he ran the risk the whole time of an arterial bleeding being renewed from the cavity in the axilla. When it shall be shown that the operation of dividing the pectoral muscle, and of tying the axillary artery at, under, or above the pectoralis minor muscle is more dangerous than tying the subclavian artery above the clavicle, I will yield my opinion that the subclavian artery should not be tied above the clavicle; but in the meantime, I may be permitted, without any great presumption, to say that this operation will be found to be at least three times more deadly in its average result than the other.

When a cannon shot strikes a limb, and bruises it most severely, without carrying away any part, constituting a sort of injury which I have explained, page 128 of my work on Gunshot Wounds, the great artery or arteries may be ruptured, not only in one spot, but the internal coat may be injured in several. I have given an account of one particular case, in which on dissection it was found that the posterior tibial and fibular arteries were torn across, and the popliteal artery, two inches higher up was closed by coagulable lymph thrown out from a rupture of the internal coat of the artery at this part. The limb mortified. These cases are supposed erroneously to have occurred from the wind of a cannon ball.

CASE 78.—A boy, twelve years of age, had a waggon wheel pass over his arm and thigh. In the thigh there was a compound fracture. In the arm there were no other outward marks of injury than two or three small wounds, penetrating only the skin; but the arm throughout was cold and pulseless. In the axilla the pulsations of the artery could be felt, but nowhere below it. On the morning after the occurrence of the injury, the boy became delirious, and in the evening of this day he died.

Mr. Stanley on examining the arm found the biceps torn across its middle, and in the same situation the trunks of the vessels and nerves were all separated from each other by the laceration of their connecting cellular tissue. The brachial artery, for about two inches of its extent, appeared to be remarkably small, and on slitting it open, its inner and middle coats in the middle of the arm were found to be completely divided, its outer coat being entire. For nearly two inches above the laceration of the inner and middle coats, the canal of the artery was extremely contracted, and filled by a slender solid coagulum.

Mr. Arnott has noticed a nearly similar degree of mischief as occurring after the passage of a wheel over the limb, and this accident has been observed by others, and particularly by Mr. Turner, in the Transactions of the Medico-Chirurgical Society of Edinburgh.

Wounds of the axillary artery have been treated not only by ligature of the subclavian artery, but also by amputation of the extremity at the shoulder-joint—a mode of proceeding the expediency of which deserves consideration.

CASE 79.—Sir C. Bell says in his Commentary on John Bell's Surgery, vol. i, p. 369, "a girl had her arm torn off near the shoulder by machinery. There was no bleeding, nor could the trunk of the artery be seen. As the arm had been almost fairly amputated by the machine, it was unnecessary to do more than make the edges of the wound even, and bring them together. As the axillary artery had not been tied, the patient was carefully watched. In the course of a few days hemorrhage did come on, and the surgeon very properly tied the artery below the clavicle. The bleeding from the stump immediately stopped, and everything went on well for several days; the stump became clean, and was granulating, when a second violent hemorrhage took place from it. The surgeon did not reach the hospital until the patient had lost a considerable quan

tity of blood. He immediately tore open the stump, which was already partly united, and now he saw the blood issuing from the main artery. He secured it; but the patient sunk next day. On dissection, and by injecting the vessels, it was shown that the artery, where it had been tied below the clavicle, was obliterated, and that the blood had passed round by the supra-scapular branch of the inferior thyroid, from the portion of the subclavian artery above the ligature into the part below."

The surgeon in this case performed a very dangerous operation in a very admirable manner, and according to the principles he had been taught. Nevertheless, it was done contrary to every principle of good surgery, and, as far as I can see, for no other reason than for the purpose of avoiding a few fibres of the pectoral muscle.

In the first place, an operation, confessedly a very dangerous one, was done when it was in no way necessary, and which proved perfectly useless, a second requiring to be performed afterwards, of a very simple kind, and which was the one which ought to have been done at first, namely, searching for the bleeding end of the artery, and tying it. A life was here lost for want of a knowledge of principles. The operation failed, not for want of anatomical knowledge or dexterity, but from misapplication.

CASE 80.—Dr. Post, of New York, in 1845, tied the subclavian artery above the clavicle, in consequence of hemorrhage from the stump after amputation at the shoulder-joint. This patient recovered, whilst Dr. Gibson's case died of mortification, and Mr. Bell's from hemorrhage. The artery, in my opinion, ought to have been secured in Dr. Post's case by an incision through the pectoral muscle in the course of the vessel.

CASE 81.—Bigneux, of the 1st battalion of Artificers, was wounded in the arm pit in a duel, on the 4th February, 1835, at Metz, and suffered a considerable loss of blood. The anterior fold of the arm-pit was divided, and on examining the wound, a jet of blood, as large as the finger, darted from it. M. Haspel laid bare the subclavian artery by a separate operation below the clavicle, and secured it by ligature. The hand and forearm mortified; the limb was amputated; in a few days the man died. On dissection, a considerable effusion of blood which had formed into large clots was found in the cellular membrane at the back of the shoulder, and which M. Haspel supposes would have led to such irritation and suppuration, as might have placed the patient in great danger if he had survived. The ligature was found on the artery an inch and a half above the part where it was divided.

Remarks.—M. Haspel offers for the consideration of surgeons the question, whether it would not have been better to have amputated the arm at the shoulder in the first instance ? I am of opinion that if he had enlarged the wound upwards, placed a ligature on the artery, immediately above where it was divided, and another in a similar manner on the lower end of it, this patient would have preserved his arm and his life. The clots of blood would have been discharged through the enlarged and dependant wound he had made, the patient being able in such cases to maintain an inclined if not an erect position for the greater part of each twenty-four hours.

CASE 82.—M. Renneville, captain of cuirassiers, was wounded in a duel by a sword, which cut through the inside of the upper part of the arm, and gave rise to a considerable hemorrhage, which was stopped by compression. The radial artery ceased to pulsate until the third day; the compression being continued in the course of the upper part of the artery, the wound healed, and the patient recovered, the brachial artery being obliterated to the space of about two inches. This case is a counterpart to No. 2.

CASE 83.—Delahaie, sergeant 33rd infantry, was wounded by a sword, which divided the brachial artery at the upper part of the arm, close to the armpit. The artery was divided in the wound, together with the median nerve, and the lower end of the vessel was readily tied; the upper end had retracted, and could only be found after enlarging the upper part of the wound, when a ligature was applied, which came away on the twelfth day. The patient recovered.

Remarks.—M. Haspel, it would appear, had taken warning by what had happened in 1835, to Bigneux, and adopted a different course in 1839, a proceeding worthy of imitation, and highly to his honour.

CASE 84.—On the 23rd of September Mr. A., twenty-three years of age, was thrown out of a gig upon the road with great violence, and lighted on his left shoulder. It was at first thought that the humerus had been dislocated downwards; on more careful examination, it appeared that the bone was in its proper place, and that the hard tumour in the axilla depended on effusion of blood. The patien was kept quiet in bed, with cooling lotions applied to the injured part. For a day or two the swelling increased, extending down the arm, and the side of the body, and attended with discoloration of the skin. On the tenth day after the accident, a sensation of gushing was felt in the armpit, and the pain and tension suddenly became as great as ever. Leeches were applied, and the case again proceeded favourably for eight days, when another gush took place. Attacks of this kind then became more frequent, and at length occurred almost daily. They were always relieved by leeches, of which about three hundred had been applied. The arm was now enormously swelled by œdematous effusion, which extended to the points of the finger. A large fluctuating tumour occupied the axilla, and distended the pectoral muscle. There was no pulse at the wrist, and not the slightest movement or sound could be perceived in the swelling. The patient, worn out by pain, loss of blood, want of sleep, low diet, and apprehension, was reduced to a state of extreme weakness. In these circumstances it seemed difficult to determine whether there was an axillary aneurism or merely a bloody effusion. The gushing sensation, and absence of pulse at the wrist were in favour of the former view, while the complete absence of pulsation and aneurismal bruit in the tumour, from its commencement and during the whole period of its existence, could hardly be accounted for, except by the latter explanation. The case being thus doubtful, and as pressure had not been tried, it did not appear prudent to resort to any operation, until the effect of careful bandaging had been ascertained. A flannel roller was accordingly applied from the fingers to the shoulder and round the chest. He derived great comfort from the bandage: the swelling of the arm was considerably reduced, and there had been no return of the gushing sensation. He continued in this satisfactory state for three days, but on the morning of the 24th, severe pain was felt in the most prominent part of the swelling. This corresponded with the hollow of the axilla, and formed a round prominent tumour, of a dark-red colour, apparently about to break. An opening was made to the extent of half an inch, when a small clot of blood only was squeezed out, and a piece of lint was laid loosely upon the wound Four hours afterwards the piece of lint was observed to be wet with arterial blood, a jet of which immediately followed. By means of a pin thrust through the lips of the wound, and a ligature tied round it, further hemorrhage was prevented for the time. The subclavian artery was now tied with a single silk ligature. The patient passed the remainder of the day tranquilly, and in the forenoon of the next seemed to be going on well. But at two o'clock, p. m., two or three ounces of blood escaped from the wound in the axilla, and a compress of lint was then secured over it by means of a spica bandage. At seven next morning, as the bleeding returned to somewhat larger extent, the surgeon stuffed the orifice with lint. At eleven, a. m., it was thought right to lay open the cavity, turn out all the clots that could be reached, and apply graduated compresses. When the artery was thus exposed it bled freely, but not with such force as to resist the pressure of the lint. In half an hour afterwards, however, the hemorrhage recurred, and as the temperature of the arm was then distinctly lower than natural, the only remaining resource seemed to be amputation at the shoulder-joint, which was done. The patient, for several hours after the operation, threatened to sink under this final act of his trials. He complained of nausea, and was deadly pale; his face was covered with cold perspiration; and his pulse could hardly be felt. Small quantities of wine were given to him frequently, and in the evening he revived, feeling warm and comparatively comfortable; the pulse became firm and could be counted—160. Next day it was 140; the day following, 120; and so on until it fell to the natural state. In other respects the improvement was equally progressive, and before the end of a week there was no room for anxiety, except on account of the ligature above the clavicle. It was longer of separating than usual, but probably lay loose for some time before it came away, owing to the patient's extreme aversion to let it be touched. His recovery was complete both in regard to the wound and the general health. The points in this case most deserving of attention are:—1. The way in which the artery was ruptured; 2. The absence of pulsation and aneurismal bruit in the tumour; 3. The inefficacy of tying the arterial trunk at a distance from the rupture, and with the intervention of branches; 4. The success of amputation in very desperate circumstances. Whether pulsation was prevented by the artery being torn entirely across, and whether ligature of the subclavian would have proved effectual if not preceded by puncture of the tumour, are questions which the writer of the case leaves to the consideration of the reader.

Remarks.—This case gives support to the fact I believe to be sufficiently established, that the bruit, hiss, or aneurismal sound which may be heard by applying the ear to the part when an artery of size is wounded, is not always distinguishable through a quantity of blood which has been suddenly effused and has coagulated, whether from a wounded artery or from the rupture of an aneurismal sac, although it is distinct as long as the blood remains fluid Pulsation is equally indistinct when the blood effused is coagulated, although the swelling may be elevated like any other tumour by the proximity of the artery, particularly if the main trunk is uninjured, and the blood has been poured out by a branch. The swelling was opened simply to prevent its bursting disadvantageously, and if the operator, on finding that arterial blood flowed in such quantity as to render further proceedings necessary, had laid open the tumour in all its extent, as he was obliged to do two days afterwards, and had secured the artery above and below the wound in it, the patient would not have lost his arm, nor have run so much risk of his life, as the operation on the left subclavian artery always occasions.

CASE 85.—Dr. Mackenzie was called, on the 5th of November, 1845, to a man who had fallen, with the whole of his weight, on a red-hot poker, the point of which entered the right axilla, immediately below the tendon of the pectoralis major, and seriously burned all the parts it touched. Eight days afterwards, a large eschar separated, followed by a copious flow of blood, which was arrested by pressure. The continuance of this by means of a graduated compress and bandage, evidently did mischief to the surrounding parts, and as the bleeding recurred, from time to time in spite of it, something more was clearly necessary. Three courses were, it was thought, open to the surgeon: one to cut through the pectoral muscle, and to place a ligature on the artery, above and below the part injured; the second to tie the subclavian artery above the clavicle, and if this should not succeed, in consequence of the collateral circulation re-establishing the hemorrhage, the arm was to be amputated at the shoulder-joint, under the advice of Mr. Syme as the third and last resource; because as Dr. Mackenzie says, "the vessel would probably have been divided in the incisions, above the injured point;" and the patient was in a state by no means unfavorable for the performance of such an operation. Again, the anastomosis existing between the branches of the axillary and subclavian arteries, rendered the propriety of trusting to a ligature of the latter vessel, as a means of arresting the hemorrhage, questionable. The subclavian was tied above the clavicle, the bleeding did not recur, and the patient recovered.

Remarks.—These four cases may be properly considered together. Four men of the greatest ability and eminence in their profession, tied the subclavian artery on account of a wound of the axillary artery; and it is admitted that in all four cases it was done above the origin of the subscapular and circumflex branches. These vessels are acknowledged to be essentially necessary for the pre-

servation of the life of the limb, the blood being brought round from the neck and shoulder by their means into the principal trunk, the canal of which was obstructed above by the ligature placed upon it. When blood had been so brought round into the main trunk above the hole in it, it is fair to inquire what was to prevent its flowing through it, and renewing the bleeding? The answer must be, nothing, unless a coagulum had accidentally formed to stop up the hole, which a very slight impulse or motion of the patient might remove, as it has been shown has taken place in many cases that have been related; or that a healthy inflammation had taken place in the artery, and had clogged its canal by the usual processes of effusion, and consequent obliteration, both being matters of mere chance. In Sir C. Bell's, case, No. 79, the blood did so come round the shoulder, did renew the bleeding, and thus destroyed the patient. In Mr. Stanley's case, No. 49, one inch and a-half, at most, of distance between two ligatures on the posterior tibial artery did the same thing; no reliance can, therefore, be placed on any presumption or idea that the collateral circulation will not always do so, and that the patient will not always be destroyed in a similar manner. In case No. 81, that of M. Haspel, the subclavian artery was tied for a wound of the axillary artery through the anterior fold of the arm-pit; the arm mortified, the limb was amputated, and the man died. The collateral branches failed to restore the circulation, and the bleeding was not therefore renewed; its failure caused the limb to mortify, and the man suffered an unnecessary painful operation and died. Death in either way. In case No 81 the subclavian artery was tied for a diffused but bleeding aneurismal swelling in the axilla after a wound. The collateral branches restored the circulation, and the bleeding was renewed. The wound was now laid open, the surgeon saw the artery bleeding freely, and concluded his operation by amputating the arm at the shoulder-joint, instead of placing two ligatures on the bleeding vessel, which might have saved the arm. The patient slowly recovered.

A Course of Lectures on Practical Midwifery.

Delivered this Session at St. Bartholomew's Hospital, and revised specially for the Medical Times,

By EDWARD RIGBY, M.D.,

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PREMATURE EXPULSION OF THE OVUM—NATURAL LABOUR.

(Continued from page 14.)

GENTLEMEN,—I told you at our last meeting that if the flooding in cases of threatening abortion be profuse, you will have little hope of saving the embryo, and I also explained the reason of this to you on the same occasion. I shall now tell you the treatment to be pursued in cases of severe hemorrhage I must, however, first notice that the bleeding in these cases has been recently supposed to proceed rather from the venous mouths of the detached portion of placental surface than from the uterine vessels.

I my last lecture I told you that we must divide the treatment of premature expulsion under two heads—the attempt to save the ovum, and the endeavour to save the patient. In cases such as those I am now speaking of, where there is profuse flooding, the former is not likely to be successful; consequently, your attention must be more especially directed to the second indication, which can only be fulfilled by the expulsion of the ovum. Now, you are aware that, in order to effect this, the uterus must contract, and the os uteri must become dilated, and the ovum must become detached, before its expulsion be effected; but you must bear in mind that while these processes are taking place, the patient may die of hemorrhage, unless some means be taken to arrest it. The best mode of fulfilling this indication is by plugging the vagina. This will control the hemorrhage, and give the os uteri time to dilate without exposing the patient to any further loss. The kind of plug you should use is of some importance. Smellie recommended pieces of charpie or lint to be introduced, until a plug of sufficient size has been formed Burns advised the use of a napkin or soft towel, rolled up in the form of a plug, and introduced in that state. Some practitioners have advised that a lump of ice should be inserted in the centre of the plug. Dr. Dewees, of Philadelphia, has advised the use of a piece of sponge, dipped in pretty strong vinegar, and well squeezed out. By means of a string attached to the sponge, it may be withdrawn when necessary for examination. This is the best form of plug with which I am acquainted, and I strongly recommend it to your notice. The blood saturating the sponge becomes coagulated by the vinegar, and thus a firm clot is formed in the vagina, with the sponge as its nucleus, which effectually prevents the escape of any blood. It produces no undue distension or irritation of the vagina, and is neither difficult to introduce nor painful to retain.

In all cases of premature expulsion it is of importance to be aware if the ovum has come away. On examination we may sometimes feel a soft mass projecting slightly from between the lips of the os uteri. This may be a clot, or it may be the ovum. Should it be a clot, it is soft but not elastic, it is irregular in shape, and neither becomes tense during a pain, nor does it advance lower. Should it be the ovum, it has a convex, spherical or conical form, it is tense during a pain, it is loose and bagging between the pains, it also protrudes more and more through the os uteri with each pain. It may be removed by the finger used as a hook, or by two fingers used as a forceps, and when removed the uterus contracts, all hemorrhage ceases, and the patient recovers from her faintness. I attended a case of this kind a few days since. When the hemorrhage is not very severe the three grand remedies to be relied on are rest, the plug, and cold; but I must caution you against the too long-continued application of cold, as it thus becomes a powerful sedative, producing symptoms of collapse which may prove serious. Dr. Dewees speaks very highly of the power of acetate of lead over uterine hemorrhage. He says that, "In many cases it seems to exert a control over the bleeding vessels as prompt as the ergot of rye does over the uterine fibre." I have personally no information to give you respecting this remedy, as I have always found the means I have before mentioned sufficient, and consequently I have never employed it. Gallic acid may also, perhaps, be useful, administered as a styptic. If the hemorrhage be very profuse, you must endeavour to remove the ovum as rapidly as possible, and, as I have before told you, this must be done by exciting the contractions of the uterus. In some of these cases vomiting occurs, and this, to a certain extent, is useful, by rousing the uterus to contraction, and promoting the separation and expulsion of the ovum. You must watch the vomiting, however, to prevent its too long continuance, as it may be injurious; when it does not cease spontaneously you may have the abdomen rubbed with camphor liniment and laudanum.

In all cases of premature expulsion, examine the napkins carefully to see if the ovum has come away. When you know that nothing has passed, and you feel the ovum within the os uteri, you may pass up a syringe to inject a powerful stream of tepid water. This was first recommended by Levret, and you will find it generally successful. In private practice you should have a bed-pan placed under the patient before using the syringe, as by this means the bed will not be wetted. Dr. Dewees has recommended the use of a wire crotchet when the ovum can be just felt within the uterus; but I consider an instrument of this kind must be dangerous when introduced into the cavity of the uterus so as to be out of reach of the finger, and it only tends to break up the ovum. The ordinary dressing forceps, or nasal polypus forceps, are much safer for this purpose. You must always bear in mind in premature expulsion that the larger the ovum the more easily will it be expelled, and, consequently, it is wrong to attempt to break it up, or to bring it away in shreds. The uterus always contracts more firmly on a large body than a small one. When abortion occurs after the fifth month, however, this rule no longer obtains, as the ovum has attained a considerable size. You may, therefore, in these cases rupture the membranes should they remain long unbroken, and you will find that the escape of the liquor amnii will hasten the contractions of the uterus, and bring about the expulsion of the ovum more quickly. With regard to the after treatment of patients who have aborted, the symptoms are very various, and you must be guided by them almost entirely. It will be advisable for the patient to remain in bed for several days, of course; and afterwards, if she be much reduced, a mild course of tonics with country air, or a residence by the sea-side, and chalybeates, will be necessary. In cases when the patient has suffered severely from hemorrhage, beef-tea in small quantities and frequently repeated will be immediately necessary.

NATURAL LABOUR.

Having finished the consideration of those morbid conditions which are liable to occur during the various periods of pregnancy, I now pass on to the subject of *natural labour;* and I shall first say a few words respecting the *classification of labours*. As early as the time of Hippocrates attempts were made to classify the different kinds of labour, and strangely enough, the division then was much the same as in the present day—into natural and unnatural labours. The ancients, however, included in the class of natural labours those only in which the head presented, whereas experience tells us that labours may also be perfectly natural where other parts of the child present. Labours were divided by Rœderer, of Göttingen, into natural and artificial, and the latter were subdivided into manual and instrumental, these being again classified into forceps' cases, &c. Dr. Smellie divided the process of labour into natural, laborious, and preternatural. Dr. Denman classified labours as natural, difficult, and anomalous. The great divisions at present in use are obtained from the continent, and are divided into eutocia, signifying natural or favourable labour, and dystocia, faulty or unfavourable labour. This is the arrangement which I consider the simplest, and which I shall accordingly use.

Natural labour requires to be thoroughly well understood, not only with respect to the changes that occur in the mother, but also as regards the changes in position of the child as it passes through the mother's parts. Labour is generally considered as being divisible into stages, and in this country it has been usually divided by authors into three stages. The first of these stages commences with the beginning of labour pains, and ends with the dilatation of the os uteri; the second stage begins when the os uteri is completely dilated, and ends with the expulsion of the child; and the third stage commences after the expulsion of the child, and ends with the expulsion of the placenta. In the German schools labour is, however, considered to be divisible into five stages, and as I think the subject may be better explained under this system of classification, I shall adopt it. Under this division the first stage commences with the first perceptible contractions of the uterus; these produce no pain in the healthy state, and often come on two or three days before the actual beginning of labour. These pains make themselves evident to the patient only by the feeling of equable tension and pressure round the abdomen to which they give rise, and have no effect on the os uteri. They are called the *dolores præsagientes*, and are described as follows by Leroux:—"The first contractions are feeble, and communicate no sensation to the patient; in order to discover them, we must place our hand upon the abdomen; if we feel the globe of the uterus raise itself and become hard, this is a true contraction. These contractions gradually increase until they excite pain, but pain is not essential to contrac-

tion—it depends on the distension and compression of the nerves produced by the resistance of the body upon which the uterus acts, and increases in severity in proportion to the degree of resistance and contraction." These pains usually come on towards the evening, and as the night advances again go off. They are seldom felt to any extent, unless there be intestinal irritation present, or the patient be of a rheumatic diathesis. The patient is generally restless, and cannot remain long in the same position; she appears to suffer from a general feeling of malaise. There are frequent calls to relieve the bladder and rectum. The os uteri is now felt backwards, and high up in the hollow of the sacrum, so that you find it difficult to reach it with your finger. In a primipara there is no longer any trace of cervix uteri; the os uteri feels like a circular dimple, which is closed and sealed up by a plug of gelatinous matter. In a multipara, on the contrary, the cervix can be felt, especially if she have borne many children, the os uteri being neither so high nor so far back as in a primipara. The cervix also presents to the finger inequalities and irregularies, the result of cicatrices, in consequence of former labours; it is also more or less open during the last days of pregnancy. In the primipara the head is deep in the cavity of the pelvis, in consequence of the entire disappearance of the cervix uteri In primiparous females, when the os uteri begins to dilate, its edge is exceedingly thin, like parchment but, as the first stage of labour concludes, and the *second stage* commences, it becomes thicker and softer. It is slightly tense during the pains. The vagina now begins to swell, and this swelling is soon followed by a considerable secretion of thick albuminous mucus. The more albuminous this discharge is, the more copious is its secretion, and the more easily does the os uteri dilate. I must here caution you against supposing that the os uteri is dilated by the mechanical action of the child's head pressing it open in the manner of a wedge; its enlargement is owing to the complete relaxation which takes place of the circular fibres, the longitudinal fibres acting with increased vigour, and pulling, as it were, the os uteri asunder. This relaxation of the circular fibres is shown by the swelled and cushiony feel of the os uteri, and the more this organ puts on the condition described, the more easily does its dilatation go on. I insist most strongly on this point, as in many of the periodicals even of the present time I perceive cases reported in which the os uteri is said to be *thin and dilatable*. Now, Gentlemen, I assure you that the concurrence of these circumstances is impossible. Indeed, if by too frequent examinations, or any other mismanagement, the secretion of mucus be arrested, the vagina becomes hot and dry, and as if raw to the feelings of the patient, the dilatation of the os uteri is immediately stopped, and if this process of inflammatory action be allowed to go on, you will place your patient in considerable danger. The pains become less regular, less protrusive, and, at the same time, more distressing to the patient, for she has now no intervals of relief between them. There is no chance of a comfortable doze, the tongue becomes dry, and general fever and constitutional irritation are set up. In these cases you must either bleed or give salines with the warm bath. Bleeding is generally followed by the best results, and often in a few minutes the patient, who was in a perfect state of fever, is again well. The secretion of the parts returns in abundance, the pains become effective, and the labour progresses very rapidly. So far, Gentlemen, we have been considering the dolores præsagientes constituting the first stage of labour. The *second stage* comprises the dilatation of the os uteri, and now the patient is no longer able to conceal her pains. If walking, she is obliged to stop and support herself until the pain is over. When the os uteri begins to dilate the pains are felt in the back and loins; they come on and go off gradually, and leave the patient quite free during the intervals. During the progress of a pain, the pulse shows a slight increase in rapidity, which again diminishes as the pain subsides. M. Hohl has advised the pulse to be counted every quarter of a minute during a pain, and gives the following as an illustration of its rise and fall during a pain of two minutes:—18 during the first quarter, 20 during the second, 22 during the third, 23 during the fourth, 22 during the fifth, 20 during the sixth, 18 during the two last. The os uteri now undergoes considerable changes. Wigand says, "In women who have already borne children, the os uteri is at this moment much lower than in primiparæ; it is thick, soft, and cushiony, communicating to the finger a spongy feel; it is cool, having quite relaxed during the intervals of the pains, and so yielding that two or more fingers can pass; the thin, hard, distended os uteri at the beginning of the labour exerts a much greater resistance against the head than when it becomes thick and swollen, for, in the latter case, the fibres being separated from each other by the swelling, it becomes more dilated." As regards the intervals of the pains, the fundus uteri, on external examination, is found to be soft and relaxed. The prominent parts of the child may be felt through the abdominal parietes together with its motions. The patient, in healthy labour, is quite free from pain during these intervals, and sometimes gets a short and refreshing doze. The os uteri will be found slightly dilated, and it may be pulled about in any direction. The membranes have receded, and the presenting part of the child can be easily felt through them. When the pain again commences the membranes become tense and protrude, the whole uterus becomes hard, and the prominent portions of the child indistinct. It has been stated that these pains commence in the fundus uteri and gradually extend downwards to the thighs, but exactly the reverse of this obtains, for the contraction commences about the os uteri and gradually spreads over the body and fundus. Pains continue to recur in this way till the os uteri has assumed a dilatation of about two inches and a half, which ends the second stage of labour.

At our next meeting, Gentlemen, I shall resume this subject.

Clinical Lecture,

BY DR. CORRIGAN,

Delivered at the Whitworth, Hardwicke and Richmond Hospitals, Dublin.

Abdominal Tumour—Fremissement in Abdomen—Mode of its production. Clinical Observations.

Mary Lester, aged twenty-six, admitted into Whitworth Hospital on the 23rd of February, 1846, with swelling of abdomen, which first appeared five weeks previous to her admission. A tumour, semi-elastic, of considerable size, but indistinct in its outline, is perceptible in the umbilical region. The tumour can be pushed a little from side to side, and on pressing the abdominal parietes over it, a distinct fremissement is perceptible. On percussing over the tumour there is hardly any increase of dulness; the action of the heart is very quick; she is suffering under occasional vomiting of greenish fluid. The tongue is red and dry; the bowels costive, and the urine high coloured; catamenia irregular.

For the last six months she has suffered from dysmenorrhea. About thirteen weeks since she had palpitation of the heart, succeeded by pain of the left side of the abdomen and frequent micturition. On her admission she was leeched on the epigastrium, and she was put on mercury, with occasional purgatives. She grew thinner and weaker day by day. About the 12th of March, irritative fever was strongly developed, marked by a feeling of burning over the whole body coming on every evening, and the sensation of burning through the abdomen became more troublesome. She was again leeched, and an anodyne draught was given every night.

On the 16th the stomach became very irritable; she had frequent vomitings of greenish fluid. For this she was ordered a blister to the epigastrium, and the following:—

R. Boracis, ℈iv.; Aquæ ℥ viij.; M. ℥j. ter in die.

19th. The vomiting continued; the pulse became very small, and the emaciation was very marked.

On the 23rd the following note was taken:—There is no vomiting, but the tongue is dry at tip, and coated yellow. The emaciation is rapid; the skin dry and scaly. She lies heavy in bed on her back; her countenance sunken; she complains very much of severe cutting pains through the abdomen, accompanied with very frequent discharges of orange-coloured mucus. The tumour in the abdomen is more perceptible between the umbilicus and right iliac region, and is somewhat tender under pressure. On pressing over it loud borborygmi are caused, and on percussing it there is hardly any dulness perceptible. There is cough, accompanied with light mucous rattle and distinct bruit de soufflet under left mamma. The pulse is very weak and intermittent, and over the skin of the chest a great number of stigmata of purpura are scattered. Wine and opium, in injection, were administered, and a blister applied over the epigastrium. She died that night.

Post-mortem.—The lungs are quite sound; there was, as I have said, a bruit under the left mamma. I have not yet, however, examined the mitral valve, but, observing the shape of the heart, its apex being formed by the left ventricle, I should say beforehand that we shall find the mitral valve sound. I may observe that, in cases such as this, of great debility and progressive anemia, a bruit is not evidence of valvular disease unless accompanied with evidence of mechanical obstruction. The aorta and its valves, I find, are quite sound, as is also the auriculo-ventricular valve; thus, you see, no value is to be attached to the presence of a bruit in the absence of the other signs of obstruction; its existence here, together with the increased action of the heart, was owing to the disease of the abdomen, to which we shall now turn our attention. On turning back the abdominal flaps, their peritoneal lining membrane is seen to be covered with lymph of considerable thickness, divisible into layers, and mixed with a kind of fatty deposition, very curious in its appearance. All the intestines are covered with the same cheesy, granular deposition, the stomach, liver, gall-bladder, &c.; the mesentery, meso-colon, descending-colon, and rectum.

Now, if we proceed to examine the tumour, and place it in situ, covered in this way with a double fold of cloth, you find, if you take the trouble to examine it, that it conveys through the cloth pretty accurately the sensation that it did during life through the parietes, and you will find it exceedingly useful in examining morbid specimens, to place them as this now is as much as possible in the position in which they lay during life. The tumour was situated between the umbilicus and the left iliac region, and had, as it now conveys through the cloth, a very deceptive feel, half solid, half elastic. A number of these signs, I may observe to you, are as well studied on the dead as on the living subject, because they are physical, and some of our best works have been the result of observations in this way, foremost among which, perhaps, is that by Piorry. Before unravelling the tumour, or seeing the mode of its formation, I may remark a curious fact connected with it during life; I allude to its not having yielded a dull sound on percussion. You now perceive that it is formed in a singular way of convolutions of the intestines coiled and knotted together by means of the cheesy, granular material, such as is deposited elsewhere and which binds them all into one mass. The tumour, you can perceive, is more or less analogous in its physical characters to a bladder distended with air, inasmuch as it glides about under the hand, and you cannot move one portion of the mass without the whole. During life borborygmi were heard over the tumour, so loud in the intestines, when pressed with the hand, as

to be audible at some distance; but to this we did not at the time attach much value; but it is a circumstance well worth remembering, as its occurrence in a tumour, or immediately over it, the intestines being pushed aside, may in future instances assist us in the diagnosis of the nature of the tumour. You may perceive that the cœcum is involved in the tumour, the whole of the jejunum and the greater part of the ilium—in fact, three-fourths of the whole mass of the small intestines. Then there is mesentery containing also this lymphy deposition, and forming the solid portion of the tumour; this solid material, too, can be observed to exist to the depth of an inch when the air is expelled from the intestines. Next, with respect to the fremissement observable over the tumour, I have some observations to make. Some of the French writers—I believe Piorry—say it is indicative of the presence of hydatids.

Dr. Bright, who has published his views on the subject, attributes it to the existence of adhesion between the intestines and the parietes, or between the liver and the parietes, and has referred to diseases of the liver in which this condition has been found; but there is a want in the link of evidence which he cites, to prove his theory: for instance, he relates it thus:—You may suppose, for the purpose of description, that, on the 1st of February, he detected fremissement, and that, on the 24th, the patient died, after a lapse, we'll say, of three or four weeks; and finding that adhesion had taken place, he set down the fremissement observed in the beginning as a sign of the occurrence: we do not hear, you observe, whether the adhesion did not take place subsequent to the date at which the fremissement was noticed. This is a matter of importance, not merely in a theoretical point of view, but for practical purposes also, in the treatment of abscesses, ovarian tumours, foreign growths, &c., in which it is of exceedingly great consequence to be able to make an accurate diagnosis.

Next to Dr. Bright's cases, came one from myself. In that case, fremissement was observed every day up to the time of the patient's death, and when actually dying, yet no adhesion at all existed, but a large tumour of a foreign growth was found, which, by its friction against the parietal layer of the peritoneum coated with lymph, produced the fremissement. Thus, then, neither the presence of hydatids or adhesions are necessary to its existence, but the one fact of the formation of surfaces of lymph which, by their friction, give rise to the phenomenon. Dr. Beatty published a case in which, from the presence of a solid abdominal tumour, fremissement existed; and it was then inferred, that only under those circumstances could this sign be detected. But in the case now before us we have a tumour formed of coils of the intestinal tube, remaining perfectly free from solidity all through, not at all hard, yet fremissement was constantly observed from beginning to end. The only point to be determined now, therefore, is, whether a mere covering of lymph over the intestines, filled with air or fluid, as the case might be, and perfently free to move about, would be sufficient to give rise to the production of fremissement; but that is a point which must, for the present, be left undetermined. The patient, I may remark, was in the hospital for at least nine weeks, and her illness commenced about a month before, and originated in an attack of dysmenorrhea. She complained on admission of pain under the ribs of the left side; this had been present since the commencement of her illness, and lasted till her death, occupying a period altogether of thirteen weeks.

I allude particularly to the duration of this case for the purpose of directing your attention to the fact, that depositions of lymph in internal organs will remain in a state capable of undergoing absorption, sometimes for so long a period as three, four, or five months. You see the extent to which lymph has been shed here, involving the whole abdominal wall, and covering the stomach, liver, &c., rendering it out of the question that absorption could have been effected, when the inflammatory process had been of such duration, but you observe the lymph in a soft, organisable state, perfectly capable of absorption under other circumstances. This is a fact of considerable consequence, as showing how necessary it is to push mercury in inflammatory affections of the internal organs. Its advantages are especially observable as regards the absorption of lymph from the pericardium and valves of the heart. On looking to the large intestine, you observe that the folds of mucous membrane in the rectum are more vascular than natural, owing perhaps to the action of the mercury. In the rectum are some remains of the orange-coloured mucus which was discharged during the last hours of the patient's life, and on the mucous membrane of the same substance are numerous small spots of greyish lymph, such as are met with when the rectum has been the seat of considerable irritation. The uterus appears to be healthy. In conclusion, I may remark, that the case is one you have not often an opportunity of seeing, and involves some important points of diagnosis, referable to the value of fremissement when present so extensively as in this case, through means of which, with the other symptoms trifling in amount, we were enabled immediately on seeing the patient to form our prognosis. Again, the case is of importance as affording us information upon the pathological fact, that lymph after so long a time remained in great part in a state capable of absorption.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XI.

LICHEN AND STROPHULUS (continued).

GENTLEMEN,—I have the pleasure to-day of introducing three well marked cases of lichen for your examination. The patients have in every instance applied within the last ten days, so that you have an opportunity of observing the disease before much has been done to alter its appearance. On a future occasion you shall witness the effects of the curative measures employed. The first case is one of lichen simplex, which you will find very closely corresponds with the model before you. The second case is a fine example of lichen agrius, of ten months' standing; and the third is the instance of L. lividus of which I last week made mention.

The first species of lichen, then, to which I would call your attention is L. papulatus or simplex, and the variety is that I have designated sparsus. The patient from whom the model was taken was David Bailey, aged thirty-six, of Dorset-court, Salisbury-square. He was admitted on the 17th of October last, after being affected three days only. The eruption was preceded by languor, lassitude, and feverishness. In the course of the night a sensation of creeping and tingling manifested itself in the arms and upper parts of the body, which was soon followed by an eruption of red papular spots, which are represented rather too large and red on the cast.

This man could give no cause for his complaint beyond the slight indisposition already mentioned, which for a few days preceded the eruption; but his pulse was full, his tongue furred, and much heat of surface existed. He suffered severely also from irritation, and could scarcely hold a short conversation without rubbing or scratching himself. At night he described this itching as much augmented, so that he was obliged to lie out of bed. When he applied to the Institution the eruption had extended over the whole body, much in the manner represented in the arm by the modeller. In a few situations the disease had become confluent, several papulæ having, as it were, coalesced, so as to form a small irregular patch the disease.

To relieve these symptoms this patient was directed to be bled to eight ounces, and purged with sulphate and carbonate of magnesia, containing small doses of the wine of colchicum, and the tepid bath was ordered once or twice a-week. At the end of seven days he had experienced great relief from the measures employed; but the eruption had not materially declined, though less irritation existed. An alterative mercurial twice a-day was now prescribed, and the vapour, instead of the tepid bath, whilst a lotion of creosote-water and bichloride of mercury, one grain to one ounce, was to be used warm to the parts when itching came on. He continued these alteratives for a fortnight or thereabouts, when, as nothing but an almost imperceptible furfuraceousness of the parts affected could be discovered, and he was otherwise in perfect health, on November 4th he was discharged cured—his malady having lasted about three weeks, which is its usual course.

The model to which I now point would be called in Willan's nomenclature strophulus confertus. I consider it lichen simplex confertus in the young subject, and I would precisely define it as L. simplex infantilis confertus; as it extended all over the body, it would belong to the division generalis (general infantile clustered lichen). This cast was taken from Edward Higgins, of Clarence-gardens, Regent's-park, who had suffered upwards of a year from the disease, which no doubt originated from the irritation of dentition; but as this process had been completed some months in this child, who had the usual number of sixteen teeth, it appears to be continued from some other cause, perhaps derangement of the alimentary canal, induced by the continued irritation and imperfect performance of the functions of the skin; this view of the case was verified by inquiry into the child's evacuations, which were unhealthy and offensive, yet there was little loss of flesh, and the child had a somewhat robust, though strumous appearance. He was directed to take three times a-day about one-tenth of a grain of biniodide of mercury (formed extemporaneously as I have before mentioned, by adding a solution of iodide of potassium to one of bichloride of mercury), and this was combined with tincture of opium in minim doses. The whole body was also directed to be washed daily with the yoke of a fresh egg in a bath of tepid water, and after drying with soft linen, an ointment, composed of bisulphuret of mercury and creosote in small proportions, was to be smeared over the parts affected, his diet was ordered to be chiefly milk and boiled meats, and all internal and external sources of excitement were to be avoided. By the steady perseverance in this plan for a month, till November 21st, the quantity of the biniodide of mercury being rather diminished than increased, this little patient became entirely free from his troublesome disease, which from the great irritation attending it, "had never," as his mother assured me, "let her have a night's rest since the rash broke out."

Another case of lichen simplex confertus, occurring in adult life, I shall shortly relate, as I have previously referred to it, in consequence of the exciting cause being rather moral than physical. Ellen Wade, aged thirty, of Broadway, Blackfriars, was admitted on the 7th of November last, presenting a well-defined case of lichen confertus, which had tormented her for four months, during which time she had been treated elsewhere for a better known cutaneous disease, which, however, only increased her sufferings. She was a servant where a boy was kept, and said that this youth had "worretted her very much," and on one occasion had caused her so much alarm that she went to bed ill, and could not sleep all night from the tingling, smarting, and itching all over her body, which in the morning she found arose from the eruption of a red pimply rash. This woman was of weak intellect, and subject to hysteria. The whole of her body presented a similar appearance to that offered by the model to which I last directed your attention, though less inflammation existed, and the parts were not so much irritated by scratching; I could find no organic derangement in this patient's general health, and therefore at once

proceeded to endeavour to excite another action in her skin by the internal administration of bichloride of mercury in one-sixth of a grain doses, and a lotion to be used warm of a weak solution of the same salt in creosote water; the use of soap was interdicted, her diet regulated so as to be mild and nutritive, and an occasional tepid bath was ordered to be used for half an hour at a time. These remedies and measures she continued for a fortnight only, with daily amendment so that on the 21st of November she was discharged cured, with directions to continue her diet and tepid baths for a short time.

I have no model of lichen pilaris, which differs only from the other varieties in ha ing its seat in and around the hair follicles, it is a comparatively rare disease, and is not very well shown in Willan's plate, which I hand round, and could only be imperfectly represented by a cast, as it extends deep into the dermis, and the hairs become implicated in the disease, and fall off after a time; it is usually very troublesome to cure, though I have seldom failed, after a month or six weeks' perseverance As a case of this variety of lichen presented last Monday, I shall briefly relate it, and this I do inasmuch as I have some hairs to show you through the microscope, which you will find worthy of your attention:--

Benjamin Jones, aged forty, was admitted on Monday last, having suffered, as he states, six months from an eruption confined to the upper and back part of the head, and the lower and front part of the abdomen, extending from the umbilicus to the pubes; this first appeared like small red pimples, which itched a good deal, and were soon attended by a partial fall of the hairs of the parts affected, whilst their roots still continued slightly inflamed and itchy; he could assign no particular cause for the complaint, unless it were poor living. The appearance of the lichen on this man's abdomen was very much like that represented in Willan's plate; but the papulæ were larger, and of a deeper red, whilst on the head they had almost assumed the appearance of a variety of porrigo decalvans, not the smooth baldness, but a more uneven variety, where each root of the destroyed hair seems thickened and enlarged, so as to raise the skin around it in a slightly conical form. As he had an asthenic appearance and a languid circulation, the persulphate of iron in infusion of quassia was directed, whilst he was told to apply an ointment composed of white precipitate of mercury and levigated sulphur in fresh lard to the parts affected Of course, we cannot yet learn the result of this case, which may last two months before relief is obtained.

The variety of the complaint under our consideration, that I have called L. agrius inveteratus, is the L. agrius of Willan, and it may be chronic or acute. I directed a cast to be made of this disease, though the modeller has failed in producing so good a representation as usual.

Mary Salisbury, aged forty-five, a servant, from the severity of the disease, which had afflicted her upwards of two years was obliged to leave her place. Her first application to this institution was on the 4th of April, 1845, and she was discharged cured, and returned to her place May 21st; but as her occupation was in the kitchen, the heat and dust occasioned a return of her complaint in the beginning of July, and it increased much in violence and severity, her arms, neck, and face being chiefly affected till the 21st, the date of her second application, when her condition was as follows:--The face, neck, and arms were of a deep red colour, from the numerous papulæ which everywhere covered their surface, though a mottled appearance was created by the pimples having become confluent in some places, where the irritation had been apparently so great as to oblige the patient to remove the points of the papulæ by scratching; a few slight crusts occupied some of these patches, whilst in others, particularly near the flexures of the joints, and in the folds of the integument of the neck, superficial excoriations existed, which, however, were not smooth, as in erythema intertrigo, but rough and papular. Every stage of lichen could be witnessed in this patient—thus, the first blush of redness, the papulæ on their early development, when they begin to die away or decline, and the scurffy state of the surface left by their disappearance, whilst the inveterate nature of the eruption was manifested by the slight crusts and excoriations before described, and the violence and continuance of the disease. This woman could give no cause for the origin of the disease, but regarded it as a critical eruption depending upon her age (forty-five), and the departure of the catamenia, though this periodic evacuation had not finally disappeared.

No information could be gained of this patient's previous habits, except her own statement that she was not addicted to any kind of excess. The irritation attending her malady was so great as to prevent her resting day or night; indeed, she went nearly without clothes, that she might indulge the painful luxury of scratching, though blood followed each attempt of the kind, with an increase, rather than any diminution, of her sufferings. This continued irritation and want of rest had somewhat deranged Mary Salisbury's health, which was evidenced by a feverish state of system, a hot skin, and frequent pulse. The immediate indications, therefore, were to regulate these morbid phenomena by appropriate remedies, which consisted of purgatives and diaphoretic diluents, with a strict regulation of the diet, whilst the surface was cleansed with mucilaginous baths and ablutions with yolk of egg and water, or thin warm gruel. At the end of ten days or so, these preliminary measures had much moderated the violence of the lichenous disorder, and still more improved the condition of the general health; consequently, a solution of a quarter of a grain of iodine, in twenty minims of liquor of potash, and ten drops of the wine of colchicum, were directed to be taken three times a-day, whilst an ointment of creosote was smeared over the more irritable parts of the eruption; the baths, &c., as before. These means were continued with little interruption and some benefit for a month, till September 1st, when a small proportion of mercurial ointment was added to her external application, and a dose of calomel and opium was taken at bedtime. By the 22nd of September the amendment was very palpable, but the lichen seemed, for a short time, to have been stationary, so that the counter irritant system was thought advisable, and, in consequence, one-sixth of a grain of biniodide of mercury was substituted for the former internal remedies, and a lotion of bisulphuret and bichlorid of mercury in small quantities, suspended in water; to be applied warm to the diseased parts.

On October 20th, three months from admission, the patient was by these means freed from her tormenting disease; but the skin was harsh and dry, and the general health but indifferent; so that the mercurials, internally and externally, were discontiued, and a lotion containing a little borate of soda and glycerine was ordered as an outward application, whilst an aperient chalybeate, with an excess of sulphuric acid, was taken as a tonic. She was also recommended to use a tepid bath once a-week, which might contain a little bay-salt, i. e., salt obtained by the evaporation of sea-water. She was dissuaded from resuming her avocation of cook. I last saw the patient on the 17th of November, four months from her first attendance, when she was quite well.

I have directed the patient suffering from lichen agrius to attend again a fortnight hence, to show you the disease after a three weeks' course of mercurials, internally and externally applied, with the use of the vapour-bath, when, should his disease present any features worthy your notice, I shall have much pleasure in pointing them out. With respect to the other varieties of lichen mentioned on the chart before you, and which I have already described, the species you saw in a patient before the lecture, which Willan called lichen lividus, is so rare a disease that I must refer back to the past year for a single case; this was an individual employed in the type-foundry of Messrs. Caslon and Son; he was a stout, plethoric man, and looked like a stout drinker. On his application his whole body was covered with lichen, which would have been called sparsus had it not been intermingled with petechiæ and livid blotches, as though he had been bruised; it came on suddenly, without any assignable cause, and quickly yielded to an acid chalybeate, with the use of the hot air bath and sulphur fumigations.

L. infantilis, or strophulus, scarcely deserves special illustration by a case. If the teeth and gums meet with due attention, and any bodily derangement be regulated with alkalines and mild mercurials, all that is needful will be done, save that soap and all irritants must be kept from the papulous parts.

Lichen urticatus is a much more obstinate variety of the disease, and in my hands has often proved more intractable than those hitherto detailed. This arises, I believe, from its being commonly symptomatic of some derangement in the circulation, and disease of the heart or blood-vessels, evinced by fainting fits, dyspnœa, palpitation, and irregularity of the pulse; and remarkably shown by the patient who presented himself on Friday last, and whose case I will relate.

Wm. Fisher, aged fifty, of Princes-street, Borough, attributed his malady to constant exposure to the night air in attending on a sick wife four years ago, since which he has been more or less tormented by this disease, which has resisted every means attempted for its cure, though he has never been away from medical treatment since it commenced. The pulse of this patient was not more than 55 or 56, and intermitted occasionally; I did not listen to his heart, or I have no doubt I should have found mischief there. He had a sallow, cadaverous look, and seemed almost bloodless. The disease of his skin—a well-marked instance of lichen urticatus—showed very little, but his agony was intense, as evidenced by his anxious countenance; indeed, he described the itching as mixed with pain and burning that defied description; in this respect the complaint resembled the next variety of disease to which I shall direct your attention (prurigo). Of course, I have little hope of benefitting this patient, at least as an out patient. I have ordered him small doses of carbonate of iron, and the use of mucilaginous baths, but he ought to be the inmate of a sick ward, to enable him to receive all the benefit our art is capable of affording.

Lichen tropicus is the last species of the disease we have been considering; but as this belongs to other countries, being only accidental in this climate, I shall add nothing to the definition of the disease I have already given. Yet, in an institution like the one in which we are assembled, where nearly 3000 patients suffering from diseases of the skin are annually entered on the books, every form of cutaneous disorder must soon become familiar, whilst the effects of the treatment employed are equally apparent; and, therefore, maladies like lichen tropicus, which may occur but once in the practice of an individual, will here display little semblance of rarity, an instance of which has this day been offered to your observation in the case of the poor man you have seen suffering from lichen lividus, which is so rare an affection, that Rayer, the author of the admirable treatise "*Sur les Maladies de la Peau*," with the nearly boundless opportunities of observation which the practice of the Hospitals St. Louis and la Charité afforded him, affirms that he has twice only witnessed this species of lichen. It is the wish of the committee of this institution that the practice, medical and surgical, should be thrown open to pupils, under similar regulations to those of the Ophthalmic Hospital, so as to give all who desire it an opportunity of studying in the book of nature the diagnosis, prognosis, and treatment of chronic diseases of the skin; and I do not hesitate to affirm that you may see more of these

complaints in this establishment in six months than in the largest hospital in the United Kingdom in six years, or perhaps in an entire life. Two hundred cases on an average attend three times a-week—Mondays, Wednesdays, and Fridays—and sixty new examples constitute the weekly average entered on the books. Each patient on his application, which is not necessarily accompanied by a governor's recommendation, has the origin and nature of his disease inquired into, when the name of his malady and its previous duration are entered in the register; his age and any other circumstance deemed of importance being also notified; then the medicines, applications, baths, diet, &c., are specified, and the indications from which they have been directed are explained to those gentlemen who attend. At each subsequent visit the results of the treatment and required alterations are in like manner inscribed in the register; so that at the termination of the case a mere glance is all that is necessary to see what has been done, and with what effect. It must be obvious that by such means, comparisons and deductions may be at once arrived at, which could only be obtained by the great labour of reporting and collecting the detached cases occurring at a general hospital through a long series of years Indeed, it is only necessary to witness the immense succession of important cases for half an hour on any of the days appointed for the attendance of the patients of this Institution, to become convinced, not only of its utility, but necessity, as the sufferers, in the majority of instances (at least, in fifteen out of twenty cases), present no light or trivial disorders which are to be relieved by a simple panacea; but their maladies will be found to have existed for a series of years, and to have resisted the efforts of public and private medical treatment; so that a long attendance and carefully regulated therapeutics become the *sine qua non*, if a cure or relief is to be obtained. Let it be recollected also that these complaints are under the eye of the patient, who has thus a double test to inform him whether his condition improves or retrogades

It often perplexes me to account for the very few cases of scabies that present themselves, and my attention has latterly been particularly drawn to this fact as the time I have fixed for decribing this common malady approaches, and I have sought in vain for the past two months for suitable cases on which I might employ the modeller to illustrates this subject; he has even offered to contract the disease himself by way of relieving me from my difficulty, which at any rate you will allow to be pressing enough, when I have this day to announce that the next chronic diseases of the skin to which I shall request your attention are three affections which have itching for their most prominent symptoms, viz., prurigo, porrigo, and scabies. The first of these maladies, however, will furnish us with abundant matter for next week's consideration, when I trust again to have the pleasure of meeting you.

ORIGINAL CONTRIBUTIONS.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery in St Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

FIBROUS TUMOUR.

(Continued from page 81.)

The early history of the case I last reported is such as to have induced a conviction in the mind not only of the patient and an experienced female friend, but also of her medical attendant, who had watched her with the greatest care, that she was pregnant. Having had a slight catamenial discharge in the two first months of her former pregnancy, the irregular and scanty appearance of it in the present case did not invalidate this supposition. The attack of flooding in consequence of her fall, and the expulsion in the course of some weeks after, of what appeared to be the contents of a pregnant uterus, tended to strengthen this opinion. Unfortunately, I neglected to ascertain whether it was considered at the time to be a miscarriage by the practitioner himself. The undiminished size of abdomen, and commencement of the sensation of internal movements like those of a child, which were examined and pronounced to be so by an experienced female friend as also by the medical attendant, seemed to remove all doubts upon the subject. She was now about six months advanced in her supposed pregnancy. From this time her symptoms became more questionable, and less indicative of the gravid state. The abdomen, so far from increasing in size, was gradually but perceptibly diminishing, so that, by the time I saw her she was not much above her ordinary size. She became liable to attacks of severe pain, and bilious derangement; had returns of what she then supposed to be hemorrhage, but which in all probability were nothing more than rather profuse catamenia, and had now the constant sensation of a foreign body in the lower portion of the abdomen.

Although a hard, deep-seated, and intensely painful mass could be plainly felt extending across the abdomen, and apparently in contact with, or arising from the posterior wall of the uterus, yet the smallness of the cervix and lower part of the uterus, as reached per vaginam, the circumstance of the sound passing only two inches and a half when I introduced it, thereby indicating that the cavity of the uterus was of the natural extent, and above all, the history of the case itself, all led me to form a very different opinion to that which I afterwards arrived at with the aid of Professor Simpson's tact and experience.

Although there could be no doubt that the opinion respecting her being pregnant, as founded on the supposed movements of the child, was evidently erroneous, yet the early history of her case strongly inclined me to suppose that pregnancy had *once* existed, and that it had come to an abnormal and unusual termination. Supposing that she had therefore been pregnant in the early part of the year, the case appeared to resolve itself into one of two conditions, either that of extra-uterine pregnancy of the ventral character, or that it had become so in consequence of injury to the uterus at an early period of natural pregnancy. The history of the case disposed me to adopt the latter view: an accident had occurred, viz., a severe fall, from which I considered that rupture of the uterus might have been the result, that the fœtus had passed into the abdominal cavity, and had formed a sac for itself, which was the painful tumour I had felt through the abdominal parietes; even the circumstance of the uterine sound passing to a greater distance than was natural, so as to be distinctly felt with the hand externally at a considerable distance above the symphisis pubis, did not seem at first to invalidate this opinion, because well authenticated cases are on record of the uterus having evacuated its contents into the abdominal cavity in consequence of rupture, the result of injury at an early period of pregnancy, and where the patient has ultimately discharged the fœtus in portions by abscess as in extra-uterine pregnancy. The extreme rarity of such cases on the one hand, and the frequent occurrence of fibrous tumour on the other, render the probabilities of chance strongly in favour of the latter condition. Fortunately the treatment required for either was not very different; the extreme tenderness of the mass indicated considerable inflammatory action, and leeches were repeatedly applied vith the best effects. The gradual and uniform diminution in the size of the mass, with an improvement in her symptoms, speaks rather in favour of its being fibrous tumour; for, had it been an extra-uterine fœtation, its size would neither have diminished so considerably, nor would she probably have been so free from pain, or have improved so remarkably in health as has been the case. The form of the mass is certainly not that which is commonly observed in fibrous tumour of the uterus; instead of being globular, with hard nodules here and there, and easily felt beneath the abdominal parietes when it has attained a certain size, it has a flattened shape, and lies at a considerable depth beneath the integuments.

The application of mercurial and other ointments is a valuable adjunct to the use of leeches in cases of fibrous tumour. In some I have mixed about a third or fourth part of iodine ointment with it, and when applied steadily for some time it has seemed to soften and diminish the size of the mass. I have occasionally introduced a male catheter, filled with ointment in a fluid state, and then discharged it into the cavity of the uterus by means of a flexible piston; but, at present, I have not had sufficient opportunities to enable me to speak with certainty of its effects beyond that it has not produced any irritation or unpleasant symptoms.

M. W., aged thirty, married ten years, once pregnant, but aborted.

March 9, 1839. Pain in the back, extending downwards to the rectum and round the hips to the symphisis pubis, with difficulty evacuating the rectum and bladder; bowels confined, fæces flattened. She began to suffer pain in the back, extending down the legs, and shooting towards the rectum a year ago; during the last four months she has suffered from piles and from occasional difficulty in passing water, which, last Christmas, became so severe as to require the catheter to be passed. This difficulty, however, abated, and did not return until last week, when she was again compelled to have the water drawn off. Her general health has been tolerably good, but her bowels are habitually constipated, the fæces being passed in a flattened form. Within the last two years she has had occasional leucorrhœa

Examination per Vaginam.—A large, hard, solid tumour was found distending the uterus, and nearly filling up the cavity of the pelvis. The os uteri pushed over to the left foramen ovale, and much squeezed and flattened by the mass. With some difficulty I succeeded in pushing this tumour above the brim of the pelvis into the abdominal cavity, through the parietes of which it could then be distinctly felt. The pain of back and pelvis, and the difficulty in evacuating the bladder and rectum, were immediately removed, and the patient felt greatly relieved.

May 25 Is in good health; the tumour continues above the brim of the pelvis, and causes but little uneasiness.

I have given this case merely to illustrate what I stated in my introductory remarks on fibrous tumour of the uterus, viz., that where it occupies the pelvic cavity, and fills it pretty completely, the symptoms which it produces by its mechanical pressure, and which sometimes amount to severe suffering and serious derangement of health, may be at once cut short by raising it above the brim of the pelvis. I cannot say that I have observed its increase of size to be accelerated by passing from a non distensible into a distensible cavity, and even if this were distinctly the case, the alleviation of her sufferings would render such a measure perfectly justifiable.

At the present moment I have a patient where a well-marked fibrous tumour of globular form can be slowly moved either out of the pelvic cavity into that of the abdomen, or, vice versâ, from the abdomen into the pelvis. In this case the mass, when I first saw her, was immovably fixed in the cavity of the pelvis; but by frequent application of leeches, and mercurial ointment with a little iodine, it has so far diminished in size as to permit of being moved as above mentioned without any degree of force.

Typhoid fever is causing dreadful ravages in the village of Maquinneville (Somme) and such is the terror resulting from contagion, that a man was recently obliged to bury his wife with his own hands.

FEVER HOSPITALS IN IRELAND.—The boards of guardians of the Castlebar and Callan Unions, have just given notice of their intention to erect fever hospitals in their respective localities.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS I'ANSON, Esq., of St. George's Hospital.

MEDICAL CASES.

CASE III.

DELIRIUM TREMENS.

Ann Jones, aged forty, dressmaker, admitted May 20, by Dr. Nairne. Countenance pale; pulse 108, soft; hands cold; the rest of the surface of the body warm, and covered with perspiration; bowels open; urine scanty and high coloured. Tongue moist, covered with a creamy fur; constant tremors of the hands; eyes restless; manner quick and hurried. She answers questions pretty sensibly, but in an abrupt manner; and evidently makes a great effort to appear composed.

Her friends state that her affairs have been much embarrassed for several months, and that in consequence she has drank more than usual, but not so much as to make her intoxicated. Five days ago she began to lose her appetite, and felt chilly; she became low spirited; started in her sleep at night and complained of a load at her heart. As these symptoms became worse, and as she had had no sleep for the last two nights, she was brought to the hospital. She was immediately sent to bed, and ordered the following:—

℞ Morphiæ acet., gr. ¼; Sp. æther. sulph. c., ʒ ss; Sp. lavand. c., ʒj; Mist. camph., ℥ viss.; 2dis horis. A mutton chop, and strong beef-tea.

May 21. Did not sleep last night, but frequently tried to get out of bed, though easily persuaded to lie down again; was constantly saying she saw rats and other dark-coloured objects running about the ward, and over her bed. Pulse now 112, soft; tongue tremulous, white, and moist; surface of the body warm, and perspiring properly, with the exception of the hands and feet, which are cold; tremors of the hands increased. She is constantly busy arranging some part of the bed-clothes. Answers rationally, but immediately after begins talking of her affairs.

Omit. haust.; R. Tinct. opii. m. xl; Aq. menth. pip., ℥ss., 2dis horis donec somnus erit. A bottle of stout.

22. She continued much in the same condition until yesterday evening, when, having taken at intervals ʒ iij. ℈ ij. of laudanum, she fell into a quiet slumber which lasted for two hours, when she awoke much refreshed, and comparatively calm. She continued to sleep at intervals through the night. She is now much less hurried; answers questions without such an apparent effort. The tremors have abated, but not disappeared. Pulse 96; hands warmer.

R. Tinct. opii, Sp. æther. sulph. c., Sp. lavand. c., āā m. xxx; Mist. camph., ℥ xiss, ter in die. Strong beef tea.

23. Slept well last night, had no dreams; manner composed; tongue cleaner; pulse 88, fuller.

Perstat.

28. Continued improving until last night, when she became restless, and again saw frightful objects; her pulse also became more frequent. Two ounces of brandy were administered; she soon became composed, and slept through most of the night without dreams.

Perst. in mist. bis die tantum., Perst. in usu sp. vin. gal. vespere.

June 2. She again had a return of the restlessness and confusion last night; and imagined she saw objects flitting about the ward. Her manner is quicker; there is a slight return of the tremors; pulse 90, soft; tongue white.

Perst. in mist. c. tinct. opii, m. xiv., omni nocte; c. tinct. opii, m. xx., omne mane.

5. She is now quite calm; has no tremors; sleeps well at night; does not dream or start. Pulse 76, natural as to volume; tongue quite clean; appetite good; bowels regular.

Omit. mist.; R. Tinct. hyosciam., m. xxx; Sp. æther. nit., ʒj; Sp. æther. sulph., m. xx; Mist. camph. ℥ x., bis die.

9 Left the hospital *recovered.*

REMARKS.

Two forms of delirium tremens are allowed to exist by most writers on this subject: one, which is rare, and is connected more immediately with the symptoms of intoxication, being characterised by redness of the face, suffusion of the eyes, a full pulse, and irritability of temper, no doubt depending on excited vascular action in the membranes of the brain. The other, and more frequent form, being indirectly produced by drunkenness, and characterised by a cool, perspiring skin; small and soft pulse; and a busy, but not furious delirium; this is called, par excellence, "True Delirium Tremens," and was the form with which our patient was attacked.

The cause of the disease was doubtless the long continued abuse of spirituous drinks, and in the majority of cases the same cause is acknowledged; and it is not at all necessary that the patients should become intoxicated. Dr. Watson in his lectures relates the case of a porter at St. Bartholomew's, who was always able to do his duty, but was constantly fuddled; he had repeated attacks, and at last died. It may also follow an excessive debauch in those who are generally temperate. The delirium traumaticum of surgeons is the same complaint: and very similar symptoms are frequently seen in those who are reduced by frequent bloodlettings, or other profuse evacuations.

The symptoms in the present case may be conveniently divided into two stages: the first being that which occurred before her admission; in fact, at the onset medical advice is seldom sought. It commenced with diminished temperature of the surface of the body, loathing of food, frightful dreams, frequent perspirations, depression of spirits, and oppression at the præcordia. On admission the second stage had fully commenced: her manner was anxious, hurried, and restless; pulse quick and small; hands and feet cold; the rest of the body warm and perspiring; countenance pale and anxious; there was much mental delusion, as evinced by her constantly trying to get out of bed, although she was easily restrained; she also imagined the presence of frightful objects (this symptom seems to have given origin to the word "blue devils," from the objects appearing always of a dark colour); there was total deprivation of sleep; there were tremors of the hands and tongue, which latter was much furred and moist; urine scanty; pulse soft, ranging from 100 to 120.

In a short time, by appropriate treatment, this stage was ended, and refreshing sleep obtained. But it may not be foreign to our purpose to inquire, how might this disease have ended had the second stage proceeded farther? As the irritability increased, the vital energies would have become quite depressed; the pulse would have been thready, and more frequent; there would have been coldness of the whole surface, with a clammy sweat; the tremors would have increased; at length a calm would have ensued, and the patient would soon have expired.

A guarded prognosis was given at the commencement on account of the severity of the symptoms; but from the fact of its being a first attack, and her constitution being yet unbroken, it was much more favourable than it would have been had she been broken in constitution, or had the disease occurred frequently before.

Diagnosis.—The former and rarer form of delirium tremens differs from the present case in being caused more directly by the abuse of stimulants; in it also the pulse is stronger; the face more flushed; skin hotter; delusions more violent; and tongue drier and redder. Phrenitis also differs from it in the pulse being hard and resisting; the tongue parched and rough; the face red; the skin dry; in the presence of headache, and the absence of tremors. The delirium of fever comes on late in the disease; is of a low and muttering kind, attended with picking at the bedclothes, and subsultus tendinum.

Pathology.—Very little has been made out satisfactorily about the morbid appearances found in those who have died of this disease, especially of its true form. Perhaps serous effusion within the cranium is the most common appearance, though frequently nothing at all morbid can be detected.

Dr. Craigie, in his "Practice of Physic" (art. Brain Fever of Drunkards), enumerates the following as most usual:—"Effusion of serum in the sub-arachnoid cellular tissue. The vessels of the pia mater distended with dark-coloured blood. The sinuses of the brain loaded with dark, semi-fluid blood. The ventricles distended with serum. The lungs congested. The right chambers of the heart quite full; the left perfectly empty. Steatomatous deposits in the coats of the arteries. The mucous membrane of the stomach thickened, or softened. The liver and kidneys variously diseased." But, perhaps, these appearances ought more properly to be referred to the continued action of the stimulus on the various organs, than to be considered closely connected with the disease in question. In fact, we constantly find all these appearances in drunkards dying of other diseases than delirium tremens; and, indeed, in those who die of it, we frequently do not find any of these appearances.

This uncertainty with regard to the morbid appearances makes the nature of the disease more difficult to be understood, or expressed. Perhaps Dr. Watson's definition is the best: he calls it "nervous irritation," and perhaps this also produces, and is combined with, exhaustion. The action of alcohol on the system has been well described by Dr. Craigie; and perhaps I may be allowed to sketch a slight outline of his views. He says (op. cit.), that on the introduction of alcohol into the stomach it immediately coagulates all the albuminous articles of food, thus of course rendering them more difficult of solution by the gastric fluid. It also accumulates the blood in the gastric vessels, and then causes it to stagnate, producing first irritation, then languor and relaxation in the villous membrane. It next becomes absorbed by the veins, which concur to form the portal vein, traverses thence to the liver, where it produces congestion, and impedes the secretion of its proper fluid. It next passes through the vena cava ascendens, into the right side of the heart, then along the pulmonary artery into the lungs; here it retards the flow of blood, and produces temporary congestion, both in the pulmonary capillaries, and in the bronchial arteries; thus inducing chronic cough and asthma, and, of course, from the imperfect arterialisation and stagnation of the blood in the lungs, the meningeal and cerebral vessels are constantly overloaded with venous, and imperfectly aerated blood; and at last, from the constant congestion, it produces irritation. The alcohol has also an immediate effect on the nervous system, which, however, is in more direct connexion with the symptoms of intoxication. But Dr. Craigie seems to argue that this state of congestion in the vessels of the brain is the immediate and exciting cause of delirium tremens, and that, therefore, the congestion should first be removed by bloodletting, and other evacuations, before the irritation is attempted to be allayed. But, with all due respect to so great an authority, I must say that this is not the plan which I have usually seen adopted. Perhaps his arguments may be better suited to the first and rarer form of the disease, for there, in fact, we have evident signs of congestion in the red face, ferretty eyes, hotter skin, quicker pulse, and greater wildness and violence of the delirium.

The *treatment* of this disease must be guided by our diagnosis in the outset. If we conclude that the affection is the first form, moderate local depletion must be employed, by leeches or cupping to the head, assisted by cold, as often as the head becomes hotter than natural; purgatives, combined with cordials, are especially useful; antispasmodics and stimulants must also be employed. In the second or true form, opium must be looked upon as the sheet anchor. We may perhaps commence with a purgative, if there be any congestion about the liver; and then, as the great indication is to calm the nervous irritation and procure sleep (for if the patient be without sleep for many days, he will be sure to die), we must give one of the forms of opium, at short intervals, and perhaps we may increase the dose at the patient's usual hour of sleep. Opiate enemata are very highly spoken of by Dr. Graves, of Dublin (Clinical Medicine, art. Sleeplessness). He says that frequently, in other diseases besides delirium tremens, when much opium has been taken by the mouth, it has soon lost its accustomed effect, and even large doses have fail he has then

ordered an enema, with a small quantity only of laudanum, and it has soon been followed by refreshing sleep. The warm bath may also assist in allaying the nervous irritation. If the digestive organs are not disordered, good nutritious drinks may be given; but they will mostly partake of the general exhaustion of the system, and the patient will then require some of his accustomed stimulus; in fact, it is curious to see how materially this assists the opium in its action, and how soon the patient will sleep after its exhibition. Dr. Nairne mentioned having treated a gentleman twice for this disease; each time he tried the effect of opium alone, but found that it produced no effect, until a glass of brandy-and-water was added about the patient's usual hour for sleep, the consequence then was that he soon fell into a refreshing slumber, from which he awoke with all the symptoms relieved. Physical coercion is seldom employed in this disease, because it still further increases the irritation, and exhausts the patient's strength; it is indeed very seldom necessary, as the delirium is not furious, and the patient may be easily persuaded by a good-tempered assistant.

Our patient, in the present case, seemed clearly to labour under the second form of the complaint; she was therefore ordered a quarter of a grain of acetate of morphia in some diffusible stimulus; this, however, produced no beneficial effect. Laudanum was then ordered to be given in large doses every second hour until sleep should be obtained; but she took nearly half an ounce of this before any effect was observed. It was curious to notice the marked alteration in her symptoms after a few hours sleep; she seemed, in fact, comparatively well. She afterwards took the laudanum in smaller quantities, and at longer intervals, and she continued improving, until one evening she had a recurrence of her former delirium, which was immediately put a stop to by a dose of brandy. This stimulus was continued for a few evenings, with an increased quantity of laudanum; and it was gradually discontinued as she was found able to bear its removal. She had perfectly recovered in less than three weeks.

REVIEWS.

Practical Notes on Insanity. By JOHN BURDETT STEWARD, M.D., Fellow of the Royal College of Physicians, London, &c. &c. 1845.

Few medical subjects excite such general interest as the care and treatment of the insane; and to none has the public attention of late years been so much directed.

At no very distant period, asylums for the reception of lunatics were—with some honourable exceptions—little better than prisons, in which, if the unhappy patients were prevented from injuring themselves and others, the object of their confinement was sufficiently fulfilled, while the harsh treatment which they experienced tended to retard, rather than promote, their recovery. During the present century, however, a vast change has taken place in the management of the insane, and most successful, in many respects, have been the efforts to ameliorate their condition. Measures have passed the legislature to provide for the better regulation and superintendence of lunatic asylums; and the commissioners, appointed to visit those institutions, have published a report, abounding in just views, and statistical information.

This important change is chiefly owing to the advancement of medical science; for while the general management of the insane may and should be controlled by acts of Parliament, their restoration to health must depend upon the judgment and skill of those to whose care they are intrusted.

It is, from men who have had personal experience in the treatment of Insanity, that we may expect to obtain such information respecting its nature and causes, as will lead to sound views on the curative means to be employed in its various phases. Such is the author of the work before us.

For ten years Dr. Steward discharged the duties of physician to the Droitwich Lunatic Asylum, of which favourable mention is made by the Metropolitan Commissioners; and his "Practical Notes on Insanity" are the produce of their author's own investigations—of the inquiries of one, who has taken the trouble of thinking for himself.

Dr. Steward justly regards "the evident loss of self-control" as the symptom of insanity or mania—for he uses these terms synonymously—which peculiarly distinguishes it from mere eccentricity. And he enumerates three species of the disorder.

1st. *Idiopathic insanity*, or the disease in its pure form, without derangement of general health, functional impairment, or disease of any organ. Under this head are comprehended all those cases which solely arise from mental emotions.

In speaking of the *absence of functional impairment*, our author, of course, means to except the action of the nervous system, for in every mental disorder there must be a corresponding movement in the nervous matter. In this kind of insanity, the passions are the exciting cause of the malady. The nervous current is disturbed by impressions that may be conducive to joy, sorrow, ambition, or despair; and the reason, the judgment, and the imagination, are consequently perverted. But the agitation of the nervous matter is temporary, and merely such as may be required for the extraordinary discharge of its functions. There is no permanent disorganisation, unless the attack be so long continued, or so often repeated, as to create an artificial habit; for then anxiety of mind may induce disease of the brain, upon the same principle that over-excitement of the circulation may terminate in disease of the heart.

In that event, the affection would lapse into the third species, which we are about to mention. Our author's second species, which he calls *symptomatic insanity*, comprises those cases which are "apparently dependent upon, or at least are accompanied by derangement of the general health;" while in the third species the state of the intellect, is connected with a morbid change, either in the brain or in some other organ.

This arrangement at once developes Dr. Steward's general views. Founded upon pathology, it leads to sound practice; and accordingly, in the remarks on the curability, symptoms, exciting causes, and treatment of insanity, we find the constant object of Dr Steward's investigations to be not how to keep, but how to cure the invalid.

To give anything like an account of the contents of this volume would exceed our limits in this notice. We shall, therefore, select a few passages, which particularly claim attention. The first of these is contained in the chapter on Criminal Insanity, wherein after remarking that nothing is more easily feigned than insanity, Dr. Steward thus proceeds.—

"It is not a few, nor even a succession of eccentric acts, that ought to be allowed as proof of the existence of that state of mind, which destroys the power of self-control, and relieves the individual from his responsibility as a free and accountable being.

"To adopt the principle, by some advocated, that, in certain cases, the act alone is proof of insanity, would offer an immunity for crime, calculated to shake the very basis of society; since, upon such a principle, the inference is forced upon us, that the more dreadful the crime the stronger evidence it affords of infirmity of mind, and the more convincing is the conclusion that no man in his senses could have committed it.

"The same individual who would have passed through life unobnoxious and unnoticed, by one act of violence becomes an object of attention. His friends, anxious to save him from the consequences, and themselves from the disgrace, review with deep anxiety his past life, in the natural hope of drawing from it some explanation and excuse for his crime. Every previous act, which, in its occurrence, excited neither anxiety nor alarm, is examined and discussed.

"One only object in view, one animus exciting, each fact is tinctured by preconceptions. The object wished is first assumed, and facts are sought to justify it. All in favour are adopted, all in contradiction rejected; and not unfrequently it has happened that evidence has been admitted as establishing the plea of insanity, which, as regarded the same individual under different circumstances, would have been condemned, and justly too, as wholly insufficient."

We wish that judges and jurymen would cogitate on this. Independently of the broad distinction between eccentricity and insanity, which our author has so clearly defined; it is a serious question, whether such reputed lunatics as have sufficient sense to be controlled by fear and other moral restraints, be not to a certain extent morally responsible; and if this be admitted, whether their punishment would not deter others in a like condition from committing similar crimes. We allude here to those half-witted persons, who, while unscrupulously injuring any one whom they may imagine to have been an obstacle to their wishes or designs, yet well know how to take care of themselves in the ordinary affairs of life, and not, of course, to complete maniacs.

The following passage, on the necessity of restraint, may be found in the tenth chapter:—

"In concluding this part of my subject I may, I hope, be permitted to add, as marking more clearly than mere words could do, my favourable opinion of the non-restraint system—which, as would appear by the visitors' reports, since 1833 it had been my most anxious and constant object to advance—that when the commissioners under the New Act visited the Droitwich Asylum, wholly without notice, at half-past 11 o'clock, a.m., on the 16th of September, 1842, there were, out of eighty-six patients, only two—both males—under restraint; one of whom had committed murder, and was, if not restrained, constantly attacking his fellow patients; and the other, a person equally dangerous and unruly. The restraint was simply the belt and runners. I wish further to observe, that although the experience of more than ten years—with, as I have said, the constant object in view, of superseding, as far as possible, the necessity for restraint—does not enable me to agree with those who maintain that restraint is *never* necessary, still I feel no hesitation in declaring my belief that, with proper rooms and fittings, the only plea that can warrant its use, is the personal safety of the lunatic himself, or the absolute necessity of imposing it, to prevent the commission of crime."

The idea of liberty is so imposing, and the spectacle exhibited by a wretched sufferer vainly endeavouring to emancipate himself from his bonds is so painful, that we are not surprised at the enthusiasm with which the non-restraint system has been very generally received by the public; but with many advantages, it is often attended with great danger to the patient as well as to those about him. In numerous instances it is found impossible to dispense with all restraint, and then the question lies between solitary confinement in a room, and confinement of the limbs alone, while the patient may have the benefit of fresh air and the society of others. With a heartfelt wish that all restraint could be avoided under all circumstances, we are compelled to agree with Dr. Steward that in some cases, although happily these are comparatively rare, it is absolutely required for the well-being of the individual himself as well as for the safety of his companions and attendants; and for ordinary purposes we think seclusion not the best means that can be adopted. "Nothing," says Dr. Steward, "is more likely to confirm insanity, or even, as facts have shown, to produce it, than long seclusion. Fits of anger and violence must be met by short periods of seclusion; but the confinement should never be prolonged beyond returning calmness, or a promise to forbear similar conduct." Dr. Steward's observations on the association of the insane with each other, and on their employments and amusements, are good. He thinks that when judiciously managed these resources are of the greatest utility, both in rendering the present condition happier, and in promoting the cure of the malady; and he says that, "There is no amusement or occupation which, to those who are well enough to enjoy it, ought to be denied." Amusement, indeed, as may be readily imagined, is not always practicable; for we well know that when the mind of a sane person is either weakened by illness, or very strongly bent upon one absorbing subject, nothing is more difficult than to divert it; and how much greater must be the difficulty with the insane, of whose disorder in many instances, a solitary, but powerful mental impression may have been the cause? There is, however, no point connected with

the cure of lunatics more important than this; for while occupations properly selected may be most beneficial to the curable, by withdrawing the mind from morbid trains of thought, and by improving the general health—in the incurable cases they break through the monotony of a life, that under the most favourable circumstances can admit of comparatively few enjoyments, and may stop the further progress of a disease which the best efforts of humanity and science fail to eradicate.

In closing Dr. Steward's work, we have to express a favourable opinion of its tendency and doctrines. Dr. Steward looks at the subject in the right direction, and with the eye of a man who has studied human nature as well as pathology. In perusing his "*notes*," we have been impressed by the excellent spirit they breathe, and the many important suggestions they contain.

TO CORRESPONDENTS.

Chirurgus.—*The degree in question is sufficiently respectable.*

A Subscriber *does not say what classical examination he means. The Latin examination of the Society of Apothecaries is in future to form part of their general examination.*

Chirurgus (Wainfleet)—*The terms of admission to the society named are a payment of one guinea annually.*

Mr. Redstone's *request shall be attended to.*

A Subscriber to the Medical Times.—*We believe our correspondent to be entitled to payment.*

Mr. Henry Smith, *house-surgeon of King's College Hospital, has sent us the following not very common case:—*

I was called up in the night of Tuesday, May 12th, to a man who had received an injury of the right arm. Before coming to this hospital he had been seen by a neighbouring practitioner, who stated that it was a dislocation of the elbow, and had used means to put right the supposed accident. On examining his arm, I, without any difficulty, discovered a fracture of the humerus, about two inches above the condyles. On inquiring into the cause of the accident, I found it had taken place in this curious manner. My patient and another man were testing their muscular strength, by endeavouring to force down each other's arm, the hands being clasped together, and the elbows resting upon a table. The former having nearly forced down his antagonist's arm, made a sudden exertion to do so effectually, and thus put the muscles of his arm into powerful action. He instantly heard a snap, and exclaimed that a bone was broken, but did not know at first whose arm was injured. He is a German, of twenty-five years of age, of muscular frame, has never had syphilis, or laboured under any debilitating complaint, and is in excellent health.

Medico-Chirurgus *writes us a long article on the Sydenham Society. He affirms that, while defending Paulus Ægineta from a "prejudiced and mistaken judgment," our article on the subject "leaves the Society just where it found it." "That body deserves much credit," he continues, "for the attention it calls to the state of medicine in past centuries; for it is something in this age to teach our great guns of medicine what is already known. It saves us a multitude of discoveries, and, what is worse, a multitude of profitless discussions as to who—Dr. H., or Dr. Somebody earlier—has the priority."* "*It is a* Medical Society of Antiquaries," *he says, "and on that score, and that alone, deserves support. It never was meant to come into competition with modern authors, or publishers; and if it try, must meet a signal failure. People say that it is not practical enough; that it's a curiosity shop, a joint stock publishing company of Dryasdusts. But practical usefulness is not its business. Your own Journal forms the* practical Sydenham Society *of the Profession. Your two large volumes—which contain almost as much, both in practice and theory, as the Sydenham Society could furnish for half-a-dozen years subscription—exhaust all that is wanted to be known in the scientific currency of the twelve months. The Sydenham Society has other purposes, and these it fulfils." Our correspondent proceeds to shew the uselessness of republishing scarce books, "which without the aid of the Society could only be met with," he sneeringly adds, "on the ordinary old book-stalls;" and he insists that if there were "no jobbing in the purchase of the paper, in the payment of the printers, and in the publishing department generally," the antiquarian portion of the profession would be largely indebted to the discriminatory genius and activity of the council and secretary. To the latter he pays a high encomium as meriting fairly the handsome remuneration bestowed on him, and as thus carrying out cleverly the real object of the society. Want of space compels us to content ourselves with this brief abstract of our correspondent's letter—in reference to which we have only to say, that we see nothing to retract in our former article on the subject.*

An Edinburgh M.D. *is thanked for his article, which we decline, however, on account of the personalities that are incorporated in it. Our opinions and his on the character and science of Professor Simpson differ* toto cœlo. *He is one of the few remaining lights of the old University.*

The Poisoning Case at the University College.—*In reference to several communications we have received on this subject, we have to say that we know of nothing to revoke in the comments we have made on it. We affix no blame to the house-physician, for, as his title signifies, he was in no way responsible for it. The responsibility lies with the higher medical and surgical officers of the establishment, who knew of the existence of the system—who were daily admonished of its evident dangers—and who took no one step for a change. It is a melancholy exemplification of a system almost universally defective.*

Dr. Haygarth writes:—"Considering society as divisible into three classes, would it not be advisable for the general practitioner to regulate his charges upon the following principle: First class (gentry), for three to five visits, one guinea; second class (trades), for eight visits, one guinea; third class (artisans), for twelve visits, one guinea. The medicines in all cases to be supplied by the medical attendant, at their true cost, without profit. The latter condition exercises an all-important influence upon the general interests of the profession

Mr. Coles *writes us a reply to our review of his book. His reference to the "eminent physician," Procrustes, was meant for a joke—though in that way it escaped our powers of recognition.* Mr. C. *insists further, by a reference to Hippocrates' work, "De aere locis et aquis," Foes. fol.* 293, *that the women of the Sauromatæ—a Scythian tribe—lost their right breasts by the early application of heated brass to that region.* Mr. Coles *is mistaken in supposing that all authors treat the Amazons as Scythians. Diodorus speaks of them as an African nation."*

A Practising Apothecary *writes a long letter to show the power and privileges of the Druggists to play the part of Medical Practitioners. He insists also, in modified terms, on their competency for that task, and quotes the Lancet recommendation often given to druggists, and persons similarly situated, to practise in defiance of the act of* 1815. *Our own opinions on this subject are so well known, that we need only furnish this brief abstract of the letter.*

S. S. T.—*A gentleman holding such a diploma would be duly qualified. A coroner has the power of summoning any duly qualified practitioner he pleases to give evidence on an inquest.*

Vindex *tells us the qualifications of the present Apothecary of the University College. Will he tell us whether the rules of the Institution do not permit the office to be held by a student of two years' standing? Has it not been so held? Is it* not now *so held?*

B. P.—*There is no fixed number of days. There is a range of from* 259 *to* 280 *days, with exceptions, of course, outside either term. But the question is,* adhuc subjudice—*vide Dr. Rigby's Lecture in our last volume.*

Mr. Ferrand's *case does not, we think, need the extended notice he seeks for it. We are, besides, anxious to avoid noticing subjects that belong properly to other journals.*

Mr. Self *is thanked for the notice from the* John Bull. *We are glad to see the able pen of that journal devoted to the service of the medical public.*

A Student *is informed that this is the 7th number of the present volume. The former numbers may be obtained by early application.*

B. Bath.—*We have been startled with some of the theories of Swedenborg on physiological subjects; but we cannot entertain any discussion which includes reference to his theological opinions.*

Medicus *can obtain the* Pharmaceutical Number *he wishes by sending postage stamps for the amount to the publisher.*

The numerous Correspondents who have addressed us on the temporary suspension of the "*valuable*" *Lectures of Mr. Startin and Dr. Costello, are assured that we estimate their importance not less highly than the most encomiastic of our readers, and that we shall not fail to do our best to produce them as frequently as possible. The Lectures of Dr. Rigby, which a* "Country Practitioner of Forty Years' Experience" *declares to be the best ever published on Midwifery, shall not be overlooked. We shall continue them fortnightly.* Perhaps this occasion may not be unsuited for the observation that the Lectures of the present volume (which cost our Subscribers but half-a-guinea) would not be purchased, if in separate works, at much less than three or four guineas.

The Pharmaceutical Number *of the* Medical Times *for May, is now ready, and contains twenty-four closely-printed pages of the most important matter to the chemist, pharmaceutist, and general practitioner. Price* 5d; *Stamped* 6d. *J. A. Carfrae, Essex-street, Strand.*

THE MEDICAL TIMES *is the only Medical Journal published at its own Office, and which is free from the control of all Booksellers and Publishers. Gentlemen may procure it by an order on any Newsman or Bookseller, or it will be sent direct from the Office of the Medical Times to Annual Subscribers sending by a Post-office order, directed James Angerstein Carfrae, or an order on some party in town, One Guinea IN ADVANCE, which will free them for twelve months. Half-Yearly Subscription,* 13s.; *Quarterly,* 6s. 6d.

THE MEDICAL TIMES.

SATURDAY, MAY 23, 1846.

> Yet let me flap this bug with gilded wings—
> This painted child of dirt—that stinks and stings.
> POPE.

THE duty of unveiling fraud or duplicity is one of the most uninviting which an editor can be required to perform. Whatever may be thought of it by the reader, whose heart, perhaps, palpitates with indignation as he scans the reproving page, it is certain than the mind of a writer returns with disgust to the consideration, and that his hand traces with reluctance the records of guilt. It is an irksome task that we cannot escape, if we would, and which we dare not, if we could. At the head of a journal influential beyond our most sanguine anticipations, there come to us claims which we cannot evade—duties we dare not abandon—responsibilities from which we cannot retreat—functions we must execute—and, as we have resolved never to be wanting in any act that may conduce to the benefit of our Profession, even at the serious risk of giving notoriety to scandalousness, we feel it incumbent on us this week to make an exposure of a mean artifice of a mischievous malice which appeared last week in the columns of another journal.

The members of the National Association are aware that, in the last number of the Transactions

of that body, the following notice appeared in the last page:—

"In order to guard against any misapprehension, the committee desire distinctly to state that the proposed National Institute in Medicine, Surgery, and Midwifery, is not intended to merge the three branches of the Medical Profession into one institution, or to form what has been termed a "one faculty" of medicine for the entire Profession, to the disparagement or subversion of the existing colleges.

"*Whatever the future arrangements of the Medical Profession in this country may be*, the immediate duty of the Practitioners in Medicine, Surgery, and Midwifery is to complete and consolidate their own organisation; and to effect this object *every duly qualified Practitioner* is admissible for enrolment in the proposed National Institute."

This paragraph was clearly inserted to allay any hostile feeling that may exist, to promote union, and to draw together into one great movement the greatest possible number of our professional brethren. Conscious that nothing but unanimity could ensure the success of their plan, the committee wisely determined to admit *any legitimate Medical Practitioner, no matter how or where qualified*, into their new Institute. The announcement was no less liberal than it was wise, and, we had thought, would have disarmed the malevolence of the most suspicious mind. As the event has proved, however, there are depths of malignity which we have not yet sounded. The acts of some individuals defy all calculation—their effrontery exceeds credibility, as their viciousness surpasses every rule of ordinary experience; they must be dealt with as moral monsters, having habits and instincts of their own, whose psychology is an incomprehensible aggregation of contradictions, displaying at the same time, and in the same act, the imbecility of the sheep, the obstinacy of the mule, and the cunning of the serpent. These are fine subjects for a moral anatomy; very apt, however, to become putrescent before their mysterious organisation has been laid bare by the critic's knife. But let us leave them to proceed to our task.

Our lugubrious contemporary—whose weekly effusion is always either a prophecy without fulfilment, or a lamentation without *external* cause—finding no opportunity, last week, for indulging in his lachrymose propensity, must, perforce, make one, and hence contrived to convert the announcement we have quoted into a subject for his "*melancholy reflections*." A *true statement* of the case would not, of course, have answered this end, so his usual resource in every dilemma was necessarily resorted to. Notwithstanding the proverbial and often avowed stolidity of our contemporary in matters of this nature, we are very sure that he understands the nature of a "*mistake*" as well as other men, and that a garbled quotation emphatically printed, so as to furnish salient points for deceitful comments, is an unquestionable falsehood in his opinion as well as in our own. The attempt to deceive is all that is necessary to constitute a falsehood; and the *literal* truth, adroitly used, is often the most ready means of insinuating a substantial falsity.

Hence it was, that our cotemporary found it desirable to publish only the *first* paragraph of the announcement alluded to; and to suppress the second, which clearly anticipated some fundamental change in the arrangements of the Profession at a future period. The editor—apparently suffering under his periodical fit of monomania—is greatly vexed that the Committee of the National Association should explicitly declare that they do not intend to establish a "One Faculty," but rather "*complete and consolidate their own organisation.*" They knew that a "*One* Faculty" meant anything or nothing; that no two men in the Profession were precisely agreed upon the meaning of the term, that it was nothing more than a vague and chimerical project, as it had been advocated by shallow and headstrong agitators—that to them the "*one*"-ness presupposed the absence of subordinate parts—that, as a governing body, for the Profession, it was a mere nebulous phantom, comparable only to the poet's description of death:—

"What seemed his head
The likeness of a kingly crown had on."

Rejecting, then, the terms of empty phrasemongers, they seize upon things, and they resolve to consolidate their own organisation." This is an object both tangible and attainable, and they wisely determine to attempt this, and this alone.

If a "One Faculty," taken in the more reasonable sense which the more enlightened can attach to it, be considered a more extensive measure, surely this is the best means of eventually attaining it. This is clearly the opinion of the Committee; and we shall act prudently and politically if we accept the present plan as a means for accomplishing yet greater advantages. The only difference between the parties is this: that the Committee are seeking to establish a means for an end—less practicable people would clutch the end without the means. Like Milo, we shall yet see such persons' hands wedged in the trunk they are striving to rive. Such folly calls down its own punishment.

Our contemporary thus comments on the mare's nest that he has been so fortunate as to discover: "What, then, is to be the 'National Institute in Medicine, Surgery, and Midwifery?' But, after all that has transpired, the subject is too pregnant with melancholy reflections, &c.:" but we refrain from transcribing any more from these "melancholy reflections," lest we should touch the hearts of our readers with more laughter than becomes the occasion. The editor is doubtless pregnant with many "melancholy reflections," which the history of medical reform has begotten in him. A character irrecoverable, an influence blighted, professions derided, a name not honoured, his word discredited, his supplications spurned, his wrath ridiculed, his plots frustrated, his duplicity unmasked, his friends perfidious, his enemies compassionate: Alas! here, indeed, is matter enough to afflict even a Democritus with "melancholy reflections!" We recommend his friends to look well to him, for these same "melancholy reflections" may settle into an incurable fatuity, of which we have recently observed several very ominous symptoms. If they desire to consult us upon his case, we can inform them that we are in possession of a balm that would "lay a flattering unction to his soul." No time, however, should be lost—the fitful fever is rapidly changing its character—the stage of exacerbation is subsiding into the collapse of despondency—the ravings of vituperation are dwindling into the whining accents of drivelling imbecility. We can imagine the unfortunate gentleman sitting solitarily in a dark corner of his chamber, with his head upon his hands, and his eyelids drooping over his passionless eyes, sighing piteously over his "melancholy reflections." "Canst thou not minister to a mind diseased?" We reply *yes!* Remorse hath a remedy—retirement and repentance. We earnestly enjoin them. With the public there may be some uses in him: for the profession there are emphatically none.

Bonum est fugienda aspicere alieno in malo.
PUBL. SYRIUS.

WE observed, in our last discourse on professional mendicancy, how often our charitableness had been assailed by adventurers unworthy of it. It may appear to some to be a subject hardly deserving consideration or comment; and yet it occurs to us to think that it merits at least some notice. It is an abuse, and therefore calls for correction; it is chiefly practised upon the inexperienced, who consequently cannot fail to be advantaged by the grave suggestions of their senior sufferers—it is a sort of "man-trap" in our professional path, and though we may not be able to utterly drive it from our presence, at least we may avoid the punishment of its gripe.

The system of professional begging we allude to is, in fact, a regular species of quackery—a scheme of deception and hypocrisy as organised and well constituted as any balm, balsam, pill, or potion treachery that is, or ever has been, the opprobrium of a civilised community.

A certain information of which we are in possession gives us the assurance that there is a sort of mendicant club, or council of beggary, for the express training of candidates for the degree of doctor in distress. Experienced officers, whose long practice in the art of "humbly petitioning," and whose skill in designing and disguising, renders them authorities in the "gentle craft," occupy the responsible position of tutors to such as may be in *statu pupillari*. These professors, as they are termed, have themselves left off trade, or at most pursue it only very occasionally, and in a very quiet, genteel sort of way. They seldom go from home on an expedition of plunder, or solicit assistance in *propria persona*, having already so well acquainted the profession with their physiognomies as to render personal applications rather hazardous. To avoid, therefore, the unpleasantness of discovery, and the probable deserts that would follow it, they find representatives in autograph letters, printed circulars, and titles of books that are about to be published, but are just now delayed for want of means.

A common trick with an old sinner of this sort is to feign a lady's hand, and announce himself to you, in a neatly-expressed matter, as the widow of a physician or surgeon, left with no more available capital than sufficed to bury her husband and buy mourning for her children. You are appealed to with a passion and pathos that would be very unnecessary if the statement were true; and are apprised that the smallest donation will be thankfully received, and may be transmitted either to the petitioner, or to some one of the fraternity, who is signalised as the Rev. Mr. Somebody.

Another plan is, for one of the tribe we speak of to address you, *bona fide*, in his own behalf, informing you that he was once in competent circumstances, but a law-suit, a loan to a faithless friend, or losses by fire, fraud, or ill-fortune, have reduced him, and a once happy family (a good round number, of course), to comparative destitution. Business is at a stand still, and beggary—stark-staring beggary—is right before him. He not only tells you that he has seen better days, but suggests the probability of being a much better man than you take him for, in proof whereof he strings as many letters after his name as would spell all the lingo in the war song of a Chippeway chief. These letters are about as interpretable as the designs on an Egyptian mummy, and have as much to do with reality as with the man in the moon. Besides this regiment of emblematics, there is generally subscribed, author of this, that

and the other, with a flourish of *et ceteras* at the end, which seem to signify that there are divers other points of consequence too numerous to mention. Of course, the whole affair is fiction—the works paraded never having seen daylight, and not being very likely ever to get a glance of it.

The same may be said of the prospectus and title-page of a work about to be issued, only wanting a little of the needful, which you are politely invited to supply, with the assurance that you will certainly either get it back again, or get a book in its place. We have ourselves been more than once tricked with this imposture, all our gainings being the getting laughed at.

The gentry we speak of having followed the practice of itinerant mendicancy sufficiently long to make its continuance either doubtful or dangerous, have acquired in that space of time knowledge enough of human weakness, and of the best methods of assailing it, to constitute them authorities in the art of drawing upon charitable bounty. The *modus operandi* they communicate to any aspirant to polite beggary, for certain considerations, present or prospective, varying with the condition of the parties interested. Sometimes the fee-total is far from inconsiderable, when much drilling is needed; and conversely, the rate of charge is proportionally low. Testimonials and certificates are costly in the direct ratio of their fulness of expression and fertility in falsehood. An indenture of apprenticeship, with a commentary on the uniform good conduct of the possessor, fetches one price—a letter, stating that the individual had deported himself with the utmost propriety, and evinced a very competent knowledge of disease, and its treatment, whilst assistant to the donor, fetches another—certificates of having attended lectures that have never been delivered, and of having obtained the esteem of lecturers that have never lived, have various degrees of value attached to them, according as they are made to resemble reality, and promise to answer the best wishes of the possessor—imaginary medical diplomas, and fantastic pieces of parchment, idealising fellowships and memberships of various learned societies, and garnished with a suitable appendage of hieroglyphical names, are considered the most costly documents of the whole.

Taught a certain decisive, yet deferential, behaviour; ground into a certain freedom in technical garrulity; and guarded with paper, or parchment, testifying to moral goodness or intellectual greatness, the protégé of the class we have described is deemed fit for his mission. And, in fact, he is, for there is such an off-hand, easy, likely look about him, and such seeming truth and sincerity in the tale he tells, that to detect the deception is often no trifling task. We have repeatedly listened to the tale of woe, told with just the fluency a man would have who was experimentally familiar with the sorrows he was reciting, and have been very nearly persuaded into the belief of it, before its falsehood was revealed by a more searching scrutiny. It is not long since a candidate for our charity waited upon us with all the superficial ceremony of a systematic, well-disciplined beggar. He played his part so admirably, and with so apparently unaffected a pathos, that we were inclined to believe him outright, and to relieve him according to the dictates of that first impulse of the heart, which seldom fails to favour the interests of the suppliant. He spoke so freely and undisguisedly of his professional education, and of his practice, from which he was removed by a fortuity he could not control, and seemingly courted inquiry so candidly, that to entertain a suspicion of him appeared to be ridiculous. An *os innominatum*, however, was lying upon the table, and, more out of pleasantry than doubt, we simply observed, "will you just describe that bone?" "With pleasure," said he, and taking it in both hands, and placing it on his head, said, he was not certain as to the exact place, but he "remembered it fitted in somewhere about there." It is not necessary that we should say he found his way out of the room unrequited for his visit.

Some little time previously, we were paid a visit by a gentleman similarly circumstanced, who, amongst other items of professional introduction, represented himself as having had a good classical education. We were not for a moment in the mood to doubt this, and familiarly talked with him upon certain subjects, literary and medical, which he rather glanced at than paused over, to discuss with us. There was a flippancy and fluency about him, and a mannerism, which were almost irresistible—perhaps most people would have hesitated to question their legitimacy, but a certain something we had learned from experience taught us the desirableness of asking still further into his character. As he had complimented himself upon his classical attainments, we thought it not uncourteous to test him on the points upon which he most prided himself. Accordingly, we modestly opened for him a page of Gregory, requesting he would give us the favour of a reading. He read, off-hand, without any respect or regard of accent or quantity; and then, at our request, translated with such an utter indifference to *literal* or *liberal meaning*, that we were constrained to stop him with an inquiry whether he could *parse* a sentence? "Certainly he could," he said, "if he could read the book, how could he fail to parse it?" This sounded like logic, but not liking to trust to it, considering the specimen we had already had, we committed to him a passage in Gregory to analyse. The first word in the sentence selected, was, *Jam*—we asked him its meaning—that of course did not signify; we asked him what part of speech it was; he said, a *verb*—"conjugate it," said we, "with pleasure," said he, and forthwith, he started off with "*Jam, Jas, Jat.*" It was impossible to be angry with the man, for he really conducted himself with the easy politeness of a gentleman out of place; but we certainly hesitated to befriend him as we would have befriended a professional brother similarly circumstanced. A smart, fashionable, fluent fellow, whose looks betokened much better circumstances than he said he was in, paid us a visit one day, to say how badly he was off, and how glad he would be if we would help him. He had occupied, so he said, and so said a certificate he carried with him, divers important posts in connection with a particular branch of surgery. It was with grief we saw him in such a position of distress, and would fain have relieved him on his personal application, backed as it was by testimony which looked like truth; but having been deceived aforetime, we hesitated in our charity, until having asked him, a question—only one, and that, in connection with the subject he professed to have particularly investigated—we asked him the peculiar circumstances leading to the cause of, and the best means of treating *prolapsus ani*, in the *male*, and *female*. A tyro in surgery will easily understand the drift of our inquiry, and the particular questions it involved. It might embrace a large and instructive discourse:—our gracious visitor, however, cut it short by observing, that, according to his experience, the most certain and satisfactory treatment was—*to lance the gums!*

THE UNIVERSITY COLLEGE.

We have awaited some time for an explanation of the circumstances by which Professor Sharpey was secured, by the Council of University College a high fixed pension, independently of all contingencies in reference to the success or failure of the establishment itself. The fact undoubtedly is most singular. No such provision was ever made for any other teacher. Professor Sharpey stood as good a chance as any of his brother lecturers of having an equable and goodly share of entries to his course. Up to this time it cannot be said that his services have not received—proportionately, at least—a fair and ample remuneration. Why, then, this singular arrangement, which implies on the Professor's part such grave doubts as to the stability of the school—which places the Professors, not pensioned, in so disparaged and unequal a position, and which finally presses down funds that are anything but elastic, in so weighty a fashion? We ask the question now, as we have asked it before: Are we to suppose that Professor Sharpey has used, for his own emolument, that large personal influence which should have been exercised solely for the good of the School? Has he won confidence so assiduously but to abuse it thus insidiously? If not, will he explain why this startling exception has been made in his favour? There is talk of political influence exercised to misdirect for personal advantage the funds of an educational institution: is the gossip true? If not, the activity of one noble lord, and the intrigues of a few commoners, should be satisfactorily accounted for. To leave things as they are is to throw serious discredit on the management; to place Professor Sharpey in a very invidious, not to say equivocal, position, and to make his colleagues feel that if he be not over well treated, they are indisputably over ill treated.

THE "JOBBED" EXAMINERSHIP.

The Court of Examiners of the College of Surgeons not only remains uncleared of that imputation of a bargained examinership which we deliberately brought against it, but the gentleman who is fulfilling the conditions of the bargain, and doing collegiate work at half price, weekly faces the medical students of this kingdom as their official examiner. Holding his own scientific position by the easy process of a pecuniary negociation, he sits officially to test the scientific worth of others; and the principal agent—active or passive—of a disgraceful compact, he adjudicates on the moral character of gentlemen.

Do the Council fancy that things can remain as they are? Do they think they will not be called to account for this dark transaction? They must lay no such flattering unction to their souls. The student feels the indignity of being examined under a bargained and purchased title; of standing before men who make the profits of testing his surgical competency the subject of mutual higgling and negotiation. The student feels that the place of honour is not with his examiners; that it is his hands not theirs that are unstained with low hucksterings of the emoluments of office. A gentleman and a man of science it may be, he sees in his examiners persons whose great distinction it is to derive a snug sort of traffic out of his petty fees!

Turning to the Profession generally, a worse sentiment predominates. That persons vested with the trust of testing the qualifications of future members of the Profession should meet in conclave and arrange how this man, their colleague, shall

have collegiate pay for doing no work, and how another man - one of themselves, also—shall have collegiate rank for consenting to a shabby money arrangement—that persons shall thus act in the fulfilment of high and responsible duties, is something so anomalous and monstrous, that we would believe it of no other body save the Council of the College of Surgeons. It is as wide a departure from respectability as it is gross as a dereliction of duty. The Profession expect for it a speedy explanation.

THE NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

This committee are busily engaged in framing a schedule for ascertaining the opinions of the members of the Profession, in reference to the establishment of the New Institute. Many of the Honorary Local Secretaries have already transmitted returns, which they have collected in anticipation of the general poll; and it is satisfactory to say that the greatest unanimity prevails in favour of the plan of the committee. There can be no doubt of final success.

There have been also numerous applications for tickets to the dinner, in honour of the venerable President of the Association, Mr. Pennington; and it is expected that the banquet will be very fully attended.

A WORD TO AUTHORS.

It is well known that the Medical Times is the only medical critic published at its own office, independently of the influence or control of any publisher or booksellers—and it is equally known that it is the only journal that is now extensively circulated throughout the Medical Profession.

To meet in some small measure the immense advantage the Medical Times thus possesses on the score of independence, the book-dealers owning other medical journals have grown into a habit of making the books they publish, both for themselves and for authors, mediums for puffing the journals so equivocally situated. Under the designation of a catalogue, pages of encomiastic trash are given to seduce readers for the unfortunate subject of bookselling speculation. This is a plan we will not uphold; and we, therefore, apprise authors, that for the future we shall not, except under special circumstances (for which they will owe us no obligation), notice any book defaced by these inappropriate mercantile puffs of publisher's journalism.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Meeting of May 12, 1846.

Benjamin G. Babington, M.D., F.R.S., Vice President, in the Chair.

An Account of a Case of Rupture of the Gall Bladder from external violence; by D. Maclachlan, M.D., Physician and Principal Medical Officer to the Royal Hospital, Chelsea.

The subject of this case was a pensioner, aged seventy-seven, a large and powerfully made man, but now reduced in flesh, and feeble. He had been a patient since March, 1841, for weakness of intellect, pile debility, and loss of memory. There were signs or symptoms of disease, except those referrible to the brain. On the 9th of February, in the act getting out of bed, he fell with great violence on the floor, having taken a hearty meal some hours previously.

He was insensible for a time; but rallied, when he vomited the contents of the stomach. There was epigastric tenderness; the pulse scarcely perceptible, and great prostration of strength. On the following day the belly was generally tender under pressure, partly about the iliac regions. He died forty-eight hours after the fall. On examination after death, it was found that the gall bladder had been ruptured, with copious effusion of bile into the cavity of the abdomen, producing intense peritoneal inflammation. The gall bladder was much atrophied, but there was no apparent disease of its coats. A calculus the size of a large nut was impacted in the cystic duct, just as it leaves the reservoir. The liver was healthy.

After referring to cases of a somewhat similar nature, detailed by several writers, the author concludes by observing that a practical caution may be derived from such a case, viz., the danger of employing emetics for the expulsion of biliary calculi—a practice which some physicians are in the habit of recommending. Dr. Stokes, in his "Lectures on the Theory and Practice of Medicine," states that a distinguished medical friend related to him the particulars of a case in which the gall bladder was actually ruptured after the exhibition of an emetic.

SURGICAL SOCIETY OF DUBLIN.

The Society held their last sessional meeting on Saturday evening, April 25; R. Carmichael, Esq., President of the College, in the Chair.

A letter was read from Dr. Colvan, of Armagh, on the treatment of certain cases of fistula in ano by ligature, the revival of which operation he had intended some time since to have claimed, upon the occasion of a discussion having taken place between some English surgeons, as to which of them had first made trial of the operation. When patients have a great horror of the cutting process, or cannot conveniently encounter the consequent necessary confinement to bed, Dr. Colvan observes that the ligature may, in many instances, be substituted. In three cases so circumstanced he had made a successful application of the practice, the first being that of a small farmer, who had a complete fistula situated an inch, or a little more, from the verge of the anus. A catheter wire, of the thickness of small twine, was introduced, twisted moderately tight at first, and retwisted at intervals of three or four days, for which purpose the man walked in two or three miles from the country. It was only when the wire had nearly cut its way out that he began to suffer a little from slight pain and swelling, which were removed at once by a couple of days' rest and the use of fomentations and poultices, and he has since remained well. In the second case the same proceeding was instituted, and followed towards the close by similar symptoms, which, however, as readily yielded, and the man became perfectly well. These two operations were done *fifteen years since.* The subject of the third was a female, in whom the results were the same.

Dr. Colvan at first thought his discovery a new one (as it really was to him), never having seen or heard of it, but afterwards found, on looking into Heister's old work, that an operation pretty much of the same kind had long since been performed, but which for some reason must have fallen into general disuse.

Dr. Colvan was convinced that in many cases the ligature might be used with advantage, but that it was quite clear it could never be available more than as an auxiliary to the knife, by which alone the various channels of a complicated fistula can be traced.

Dr. Benson observed that Dr. Colvan was well known to and much respected by many of the members present. He (Dr. Benson) was not disposed to say much in favour of the ligature, though he was of opinion that in many cases occurring in very timid patients it might be prefered to the bistoury. Perhaps Pott's condemnation of the ligature was too sweeping when he said, "It would be an abuse of the reader's patience to dwell on it, as the operation is, on every principle of ease, expedition, safety, and certainty, unfit for practice." Press of business, Dr. Benson feared, would preclude the discussion of the merits of the operation on that night.

Two new instruments, the one a uvulatome, the other for dividing the frænum linguæ, were produced.

Dr. Beatty, in bringing these instruments before the Society, said he would not occupy their time at any length, as he and the other members looked forward with much pleasure to hearing the address about to be delivered by the learned President at the close of the evening. Dr. Beatty then alluded to the difficulty and danger frequently attendant on the performance even of the trivial operation of division of the frænum linguæ in children; the difficulty consisting in the elevation of the tongue by means of a finger placed beneath it—a proceeding in some instances impossible when (as happened in a child on whom Dr. Beatty had lately operated with the new instrument) the whole body of the tongue, even to its tip, is tied down to the floor of the mouth. Impressed with the necessity of obtaining some contrivance by which a division of the vessels at the root of the tongue might be avoided, Dr. Beatty gave the subject some attention, and had constructed the instrument now exhibited, which resembles very closely the ordinary dressing scissors, its blades, however, being perfectly blunt and curved, and not closing completely, an interval being thus left which receives the frænum. The instrument enables the operator to elevate the tongue and stretch the frænum, and so to avoid wounding the sublingual vessels.

The next instrument—the uvulatome—Dr. Beatty observed, displayed much greater ingenuity in its construction, and was the production of Dr. Carte, who, to have its merits accurately represented, ought himself to have submitted it for the inspection of the Society. It had been placed in his (Dr. Beatty's) hands by Mr. Millikin, by whom it had been constructed, and he looked upon it as an exceedingly ingenious contrivance for facilitating the removal of a portion of the uvula; for this, though a very simple operation, is sometimes attended with difficulty, and occasionally, too, with danger, on account of the detached portion falling into or against the air passages. The instrument consists essentially of a pair of scissors with blunt points, but, in addition to the ordinary cutting blades, there are beneath these, attached by means of screws, a pair of blunt supplementary blades, whose flat surfaces come in contact with the uvula and seize it while it is being detached by the cutting blades, thus constituting an effectual provision against the occurrences just alluded to.

Deafness from various Causes.

Dr. R. J. Massy, who has devoted a good deal of attention to aural surgery and the diseased conditions of the membrana tympani by investigation through means of the auriscope constructed by Dr. Warden, of Edinburgh, read two or three cases to the Society, the most remarkable of which arose from scrofulous deposition in the membrana tympani.

The President's Address.

The President first proceeded to read over the proceedings of the Society during the past session, occasionally commenting on the communications of most interest, of which, as they have all been already before our readers, it is only necessary to remark that many of them were mentioned by the President in terms most flattering to the contributors.

"Never," continued Mr. Carmichael, "having attended the meetings of the Society as President of the College until this year, I had a very inadequate notion of the depth and extent of information to be obtained not only from your written transactions, but from the research, clash of intellect, and astuteness of mind which the discussions upon each subject brought out; and permit me also to express the pleasure I experienced in observing, that, however different and opposite the views on the subject under discussion might be amongst you, the debates were conducted in a spirit of the most perfect amenity, good feeling, and gentlemanlike demeanour, evincing that the great object in view was the ascertainment of truth.

"The construction or arrangement of this Society is excellent; for while those alone qualified to practise the medical profession join in debate, the juniors on the cross-benches, although silent, are not

debarred from the information to be gathered at your meetings.

"Gentlemen, while listening with pleasure and advantage to your communications and discussions, I could not but feel deep regret that the public were not sufficiently aware of the acquirements and practical information of the regularly educated medical men of this city; and that, instead of placing their confidence entirely upon them, they should so frequently bestow it upon others in every respect their inferiors. But I have no doubt that ere long the intelligent portion of society will perceive the folly and absurdity of trusting their health and lives to those who are in no way qualified for so important a trust.

"The medical profession in Great Britain is at present most peculiarly and unhappily circumstanced. It has been for centuries, as in the rest of Europe, divided into three classes:—Physicians, surgeons, and apothecaries.

"With respect to physic and surgery, it is now universally admitted to be an artificial division not existing in nature; and between which—excepting surgical operations—no distinct line of demarcation can be drawn, and, therefore, it is now granted that any individual, to practise either branch as he ought, should be educated in both.

"But it is quite the reverse with respect to pharmacy. An apothecary can perform the duties of his department, though totally ignorant of the structure and functions of the human frame, either in health or disease. Indeed, it would be better that he was totally ignorant on those points, as such knowledge might lead him away from attention to his own peculiar vocation.

"Yet, strange to say, the apothecary in civilised England, and in Ireland of late, is engaged much more in the business of prescribing than of compounding medicine. So much so is this the case, that at least three-fourths of his time is occupied in the pursuit of medical practice, while his shop is left to the care of his apprentices and assistants.

"Now, it is self-evident that while he is thus engaged in the pursuit of medical and surgical practice, supposing him even qualified for the duty, he must of necessity neglect his legitimate business—the preparation and compounding of medicines; and it is equally self-evident that an apothecary's shop is not the fitting place to learn anatomy, physiology, and the nature and treatment of diseases. Therefore, while he neglects his own peculiar department, he occupies a position he is unfitted to hold, to the exclusion of those who have *laboured for years, hard and assiduously, to qualify themselves for trusts the most important.*"

The President went further into detail respecting the evils connected with the association of the practice of pharmacy with that of medicine and surgery, and concluded a long and eloquent address with the following observations:—

"If Sir James Graham had thrown overboard the selfish representations of medical corporations, and only attended to a very few principles upon which medical reform, to be useful to the nation ought to be based, he would not have been foiled in his benevolent and patriotic exertions.

"These principles are:—

"1. An improved system of education, both preliminary and professional.

"2. The union of physic and surgery, at least in education.

"3. The separation of the practice of pharmacy from that of physic and surgery.

"Lastly. Uniformity of qualification, as far as can be obtained, and reciprocity of privileges to the profession in each great division of the United Kingdom."

The President dwelt upon the great advantages that might be expected to arise to the profession and the public from a legislative system founded upon these few but important principles, and said, in conclusion:—

"Gentlemen, I ought to apologise perhaps for introducing a subject that many may esteem foreign to the objects of this Society, but it arose naturally from the indignation I feel at seeing those heretofore subordinate to our profession interfering thus with the legitimate rights of such men as I see before me—men who, after a severe and protracted course of study to learn a complicated and most difficult profession, are immensely neglected by the public, although as highly informed in all its branches and as well prepared to meet the wants of the community as can be met with in the metropolis of England or in any part of the world."

PATHOLOGICAL SOCIETY OF DUBLIN.

Meeting of the 28th March, 1846.

[From our own Correspondent.]

DR. O'FERRALL in the Chair.

Endocarditis of Five Days' standing.

Dr. Corrigan said the preparation before the Society was one not of very common occurrence, and as it was likely to afford some instruction, he thought it worth presenting. The preparation was illustrative of the results of endocarditis of only five days' standing, the valves being free from organic disease. There is yet, he remarked, insufficient information as regards the pathological conditions attributable to the first stage of endocarditis, and in the heart which he now exhibited was seen at this early stage the deposition of lymph, which leads to the subsequent process of contraction that closes the auriculo-ventricular orifice. The subject of this case, a girl named Hyland, aged eleven, had an attack of scarlatina, from which she became convalescent on the 17th of this month, and the day after was attacked with the ordinary symptoms of pericarditis, dyspnœa, cough, pain in the cardiac and epigastric regions, and tenderness in the latter when pressed hard. The pulse was 125, and the action of the heart tumultuous, together with indistinct bruit. Next day the symptoms were aggravated, the dyspnœa became more urgent, the pulse 130, and the bruit now loud. No friction sound existed over the heart, but there was extensive dulness on percussion over the cardiac region, extending as high as the left sterno-clavicular articulation, and beyond the right border of the sternum into the right side. Under this continued aggravation of the symptoms, the pulse remaining at 130, but now becoming almost imperceptible, and the other symptoms as he had sketched them, the patient died on the night of the fifth day from the commencement of the attack.

A diagnosis of pericarditis and endocarditis had been made, and upon examination the pericardium was found distended with fluid to the amount of a pint or more, and it extended laterally so far as a couple of inches beyond the right border of the sternum, not by dragging the diaphragm in that direction, but from actual distension of the bag itself. It extended also as high up as the left sterno-clavicular articulation, and downwards beneath the mamma of the right side.

The specimen so far, Dr. Corrigan observed, presented nothing with which the Society was not already familiar; but he now came to the point of interest connected with it. When the heart was opened, a deposition of rough lymph of considerable thickness was seen along the whole of the free edge of the mitral valve, so exceedingly well marked that when first seen he knew of nothing to which it might more aptly be compared than a thick cord of light red chenille stitched along the edge of the valve. This rough deposition of lymph, he observed, is exactly analogous to that which is observed in peritonitis, or serous inflammation in any other part of the body.

Examined through a magnifying glass of very low power, this edging of lymph is seen as a soft, pulpy, irregular bordering, running all round the valve. With a little force it can be torn off, leaving the serous membrane of the edge of the valve unaltered beneath.

It can be now readily understood how this deposition would ultimately cause narrowing. The lymph would soon become fully organised, and then, taking on the process of contraction, which lymph under such circumstances always does, the final result would be the circular contraction of the fore edge of the valve, and at least the ordinary appearance of narrowed auriculo-ventricular opening. The situations in which the lymph had been deposited also explain the circumstance observed in confirmed narrowed auriculo-ventricular opening, viz., that the free or floating edge of the mitral valve is the seat of the contraction, while the middle portion and base of the valve attached to the annular tendinous margin remain unaffected.

Dr. Clarke presented to the Society a specimen of aneurism of the abdominal aorta, taken from the body of a man lately under the care of Dr. Ferguson at Sir P. Dun's Hospital; through the kindness of that gentleman he had an opportunity of presenting it to the attention of the Society.

The man was thirty-five years of age; a clarionet player by employment; of intemperate habits, but never had suffered from any affection of sufficient importance to confine him to bed, with the exception of an accident he met with about two and a-half years ago, namely, falling from a car while in a state of intoxication, and which occasioned a fracture of the seventh and eighth ribs of the left side, a little external to their angles. From this he recovered perfectly, and was able to pursue his old habits until last October, but now began to suffer from dull pain in the scrobiculus cordis, lost his appetite, rest, &c., and became much emaciated.

He applied for relief at a dispensary, where he was told he had disease of the kidneys, and continued his attendance there, without benefit, up to the period of his admission into the hospital, which occurred on the 3rd of March, 1846, the symptoms being then as follow:—Countenance expressive of great distress and apprehension; very considerable emaciation; colour anæmic; complained of a dull heavy pain in the epigastrium, always worse after eating, whether much or little, and the aggravation of suffering lasting for about half an hour after meals, then moderating to its regular intensity, the spot over which the pain was felt not being larger than the palm of the hand. He also complained of lancinating pains along the posterior edges of the borders of the ribs, corresponding with the insertions of the diaphragm. He asserted positively that both these pains were constant, never remitting; there was some slight dysphagia; and the patient lay easiest in a position midway between the lateral and supine, his pelvis being flat, while his neck and shoulders were bent towards the left side, one leg being flexed on the trunk, the other extended. He suffered from palpitation of the heart; total want of rest; pulse 112, and small; appetite bad; bowels usually confined; the urine, he said, did not run in its usual free way, though he was obliged to pass it more frequently than natural; this Dr. Clarke supposed gave rise to the man's having been pronounced to be affected with renal disease.

On examination of the epigastric region, a tumour, the size of a small orange, was distinguishable, midway between the umbilicus and ensiform cartilage and to the left of the mesial line, which pulsated strongly. On applying the stethoscope, a loud bruit, synchronous with the impulse, was audible, but on tracing the aorta downwards to the umbilicus, both impulse and bruit were lost; and on passing upwards towards the heart, the bruit gradually diminished in intensity, until over the heart it was lost altogether. The sounds of the heart, further than being weak, presented nothing unusual.

On pursuing the examination posteriorly, a very obscure impulse was obvious on either side of the spine, unattended with any bruit. Whether this latter was owing to the greater thickness of the superimposed parts, as compared with the anterior wall of the abdomen, and thus preventing the communication of the sound, or that the erect position of the patient while being examined posteriorly caused the blood to gravitate more directly on the tumour, distending its walls, and thus preventing the bruit, Dr. Clarke was unable to say, as he had neglected to examine him anteriorly in the erect position, which of course would at once have shown the presence or absence of bruit as determined by position. The chest offered nothing in its auscultatory phenomena, further than extreme weakness of respiration.

The diagnosis was aneurism of the aorta above the cœliac axis, probably arising from the anterior wall of the artery, from the absence of all neuralgic symptoms affecting the testis, bladder, sciatic, or crural nerves. With respect to treatment little need be said; it consisted of that generally adopted in such cases, viz., restriction as to fluids, small quantities of animal food, very small bleedings

narcotics, locally and generally. The only difference noticed from the time of admission was a return of appetite, and a considerable relief at first from the use of opiates, but on the sixth morning after admission he complained of extreme pain, and there was great restlessness; the pulse hemorrhagic, and considerable tenderness of the epigastrium, in which state he remained until one o'clock the usual hour for patients to be visited by their friends; at this time his sister came to see him, and he expressed himself immediately relieved from pain, and remained conversing with her until the hour had elapsed. She had hardly left the ward when he was seized with vertigo, tinnitus, and faintings. He remained insensible for some minutes, and then was roused by gentle stimulants. At four, p. m., he had a similar attack, from which he was also roused, but it was almost immediately followed by a third and fatal fainting fit.

On examination of the body eighteen hours after death, there was observed, externally, considerable emaciation with extreme rigidity of the muscles. On opening the cavity of the abdomen, a small clot of blood, not more than four ounces, was found smeared over the surface of the small intestines. This proceeded from the great omentum, the layers of which at their attachment to the stomach were separated by a large clot of blood, which had passed down behind the stomach under its peritoneal coat from the lesser omentum, the cellular tissue of which was also distended with coagulated blood. On removing the aorta, œsophagus, stomach, and intestines, the aneurism was found to arise, as had been supposed, from the anterior wall of the artery by an oval opening, about half an inch long, and just corresponding to that part of the artery which passes behind the crura of the diaphragm. The diaphragm was inseparably connected to the cyst of the aneurism. On the left side the opening in the cyst was extremely small and to the inner and right sides of the œsophagus. From this the blood had been effused into the layers of the lesser omentum, and had passed upwards along the œsophagus towards the posterior mediastinum. The heart was found very slightly dilated without hypertrophy, the valves somewhat thickened, not to a degree, however, to interfere with their function; the arteria innominata was much thickened and cartilaginous.

MISCELLANEOUS CORRESPONDENCE.

HICKMAN *VERSUS* DICKENSON.

[To the Editor of the Medical Times.]

SIR,—You may have more influential, though perhaps not many stauncher supporters than myself. I advocate your cause, because I have observed that while your pages are open to all that is interesting to the profession, they are closed against those paltry effusions which seek to injure the character of a professional brother by wantonly laying bare some unfortunate mishap which may have befallen him in his practice. In common with others who read an account of the trial for manslaughter of Mr. Dickenson, I cordially concurred in the disgust evidently felt by the judge at seeing such a case brought into a criminal court. Consider it in its worst light: allow that in a moment of agitation Mr. Dickenson mistook a clot of blood for the placenta. Would it not, I ask, be the duty of a brother practitioner, on finding out the error, at the same time that he took the necessary steps to remedy the mischief, to do all in his power to keep the bystanders from discovering the mistake? Is it the usual custom of respectable medical men on such occasions to call out, "Do you call this the after-birth? I will show you the after-birth." (Medical Times, p. 514.) Where is the medical man who has been in practice for any length of time who could truly affirm that he has never made an error in judgment which has endangered the well-doing of his patient? I believe such a one is not to be found, and the regret that this liability to error is universal, ought to make all proper feeling practitioners tender of the reputation of others. The man who would maliciously take advantage of a mistake to ruin another's practice ought to be looked on as a foul blot on his profession. I should never have addressed you thus, only I grieved to see your pages taken up with such a letter as that of Medico-Chirurgus. Peruse it carefully, and see whether you think its *ostensible* object—the benefit of the junior members of the profession—is likely to be accomplished. The animus which dictated it is far too glaring to admit of such a supposition. If such conduct as that of the promoters of this trial is to be held up to admiration instead of reprobation, in vain may the National, or any other Association, strive to improve the standing in society of the general practitioner.

I trust, Sir, that in your next number you will notice this subject, and I hope that the insertion of the letter may have been an oversight. On first reading it I was forcibly reminded of days gone by, when a journal which then occupied your present eminence, with merciless venom, not only watched with the eyes of Argus for an unfortunate case in order to damage the reputation of any one who was not a sworn supporter; but allowed quiet and peaceable practitioners, to be at any moment dragged before the public by the waspish malevolence of some mean spirited rival. It would not be uninstructive to calculate the share that this has had in bringing the said journal into its present unsaleable condition.

I am Sir, your obedient servant,

MEDICUS.

⁂ On the principle of hearing both sides, we give insertion to this note. The letter it replies to was furnished us by an able correspondent, who gave us his name. We published it as a comment on a *public trial*. We agree with Medicus on the cruelty of making a professional mistake in private practice the source of further suffering to its unfortunate cause; but public investigations before the country's judges stand in a somewhat different position. Here must end the correspondence.—ED.

POISONING IN NORFOLK.

An investigation took place at Happsburg, in Norfolk, on Monday evening last, before the coroner Mr. Pilgrim, of which the following are the principal facts:—The village of Happsburg is situate on a cliff overhanging the sea, thirty miles from Yarmouth, and fifteen miles south of Cromer, and is better known as Haisborough, from its contiguity to the famous light-house of that name. It is one of the most secluded villages along the coast, with a population of two or three hundred In. the parish, Jonathan and Anne Elizabeth Balls, the former seventy-seven, and the latter eighty-three, were supported by parochial relief. They had three daughters married, who had a number of children; several of these having died suddenly, the coroner's inquiry arose. Three years ago an infant nine weeks old, named Anne Elizabeth Pestle, a grandchild of Balls, died, and was buried in Haisborough churchyard within a few hours. The next was a boy, Samuel, of the same parents, whose death took place under precisely similar circumstances in last September, and was interred by the side of his sister. Three months afterwards two more deaths in the family occurred—the wife of Balls, and another of the grandchildren, Elizabeth Anne Pestle, who were both buried on one day. No suspicious feeling seemed to exist. However, the death of Balls, occurring on the 20th ult., after being attacked in a similar way to the other deceased members of the family, many rumours got afloat in the neighbourhood that his death, with the others, had been the result of poison. The corpse was buried, and a large number of villagers attended the funeral. Not the slightest notice was forwarded to the coroner by the parochial authorities, but numerous communications were sent to the coroner, and that gentleman at length issued a summons to the authorities for the disinterment of Jonathan Balls and Anne Elizabeth Pestle, the little girl, who were buried on the same day, and empanelled a jury to inquire into the cause of their deaths. At the first meeting of the jury, the coroner, in consequence of some private information he had received, to the effect that the deceased's death had really taken place from poison, the extraordinary preservation of both bodies indicating the fact, refused to swear Anne Pestle, a decent-looking woman, the mother of the child, who it was understood was the only witness that could throw any light upon the affair. This course, it appears, was adopted from the circumstance of her having some twelve years ago bought arsenic for the purpose of destroying rats. Being desirous of affording all the information she could, she stated that her child had certainly died suddenly, as well as her father, but she had not the slightest reason to suppose that they had died from poison. The death of her child she attributed to sore throat, and her father's to old age. The jury, on viewing the remains of Balls, were surprised on finding in the coffin two walking sticks, one on each side of the body, an iron poker, several pocket handkerchiefs, and a piece of plum-cake in each hand. The inquest was adjourned in order to allow of a *post mortem* examination being made, the coroner again adjourned the inquiry until Monday last, with a view of having the three other bodies lying in the church-yard exhumed and examined, as the medical gentleman had satisfactorily ascertained that the death of Jonathan Balls and his grandchild Anne Elizabeth Pestle had been produced by arsenic.

The following witnesses were examined:—

William Pestle, a labouring man, son-in-law to the diseased, Jonathan Balls, identified the bodies as those of Elizabeth Balls and Anne Elizabeth and Samuel Pestle. His mother had been dead nineteen weeks. He saw her a few hours before she died. She appeared to be very quiet, as if asleep. No surgeon attended her, and she had been bedridden for the last four years. There were in the house at the time of her death, his wife, Mary Green, and Elizabeth Peggs, married women; her daughter, Mary Slaughter; Sarah Kerrison, the servant; and old Jonathan Balls. He did not know anything about the poison they were said to have had. He did not know anything about poison being purchased by his wife. He had heard her say that, thirteen or fourteen years ago, she wrote a note for arsenic, and sent it with a little girl for the purpose of killing the rats. His master, Mr. Pye, suggested that poison; but he never saw any of it in the house. It was laid for rats in the coal-house. Never heard of any poison being purchased just before Mr. Ball's death. The first time he heard anything of it was yesterday fortnight. He was told of it by John Wright about a week after Jonathan Ball's death. He told him that he had been to Mr. Heckley's, a druggist of Statham, and purchased some arsenic to kill rats.

Sarah Kerrison, a young girl living as servant at Great Yarmouth, lived with Mrs. Balls for near five years, until she died. She attended to her. Her husband was much with her. Mr. Clowes attended her occasionally. On the Friday previous to her death she was taken very sick. She was very feeble. She could not attend upon herself. Had seen her husband give her some drink, generally cold water or cold tea. He always mixed the tea for her. She used to drink it from the spout of the tea-pot.

Coroner.—Did you ever notice anything unusual in his making the tea?

Witness.—One day after she was taken seriously ill, I saw Balls, her husband, put some water into the teapot, and then drop two or three pinches of a powder into it. It was white, and seemed to be flour; did not know where he got it from; thought at the time he was putting in something to do her good. This took place on the Saturday, and she died on the Tuesday. She was very sick afterwards. The daughters did but very little for her; they did not understand her ways. She was very fond of them, and they of her. The old man seemed very kind to her. Never knew of poison being kept in the house. I was taken ill on the Saturday night previous to the wife's death; I was very sick, and he said to me, "I suppose we are all going to be taken alike."

By the Coroner.—One of the daughters was taken ill—Mrs. Green; she had eaten a piece of herring for breakfast on the Saturday morning, and she thought it made her ill; cannot recollect what I had been eating. Mrs. Green and I were sick together. Old Mr. Balls was sitting at the table. I drank tea with them. Cannot say who cooked the herring. I was taken ill after breakfast. I am sure that the white stuff was not tea. He put it in quickly, as if he was desirous of no person

seeing what he was about. Did not notice an sediment at the bottom of the water in th pot.

Phœbe Anne Neave, a single woman, said—have known Balls some years. About two years ago he asked me to write a letter to Mr. Sadler, o North Walsham, druggist, to get some arsenic, he had rats, or he wanted to destroy rats. refused several times, and said, "I must not do it, as I have heard of many bad things being done witl it." He replied, "You need not be afraid, I am not going to use it for any bad purpose;" but stil refusing, he remarked, "Why can't you write on for me as well as for my daughter, Mrs. Pestle?" I told him I was then young, and knew no better, as it was twelve years ago.

Mary Slaughter, residing in the same house as Mrs. Pestle, deposed—I knew Balls, his wife, and grandchildren, and attended them when ill. recollect that the whole of them were sick a few hours before they died. The little girl, Anne Elizabeth Pestle, who was nine weeks old, died first. She had been ailing and was wasted away. She died in my arms. The grandfather came frequently to the house after she was dead, and said it was a happy release. Samuel was the next that was taken sick. He was taken ill at the grandfather's, who brought him home to his father's. He was taken ill about five o'clock in the evening, and died at eight o'clock the same night.

By the Coroner.—We thought the children might have died from sore throats. Never saw children die in such a way as Mrs. Pestle's. Believed a child of Mrs. Green's died some years ago at East Reston, after visiting the deceased Balls, in rather a sudden manner, and a coroner's inquest was held upon it. A post-mortem examination was not made.

Mr. G. W. Firth, surgeon, of Norwich, was then examined.—I assisted Mr. Clowes in the post-mortem examination of the bodies that have been exhumed this day. We first examined the infant; it was so much decomposed that its various parts could not be distinguished, and therefore, though we have been unable to trace poison, it is possible that it may contain some. We have looked for arsenic, and have applied the usual tests, and a more elaborate and prolonged examination might detect it. We next examined the boy, Samuel Pestle. The internal organs were in a remarkabl state of preservation. We found some small ulcer in the stomach, which was coated with a brillian yellow matter. These yellow appearances we sus pected were a decomposition of the white arsenic We cut out one of these yellow spots, and succeede in reducing the metallic arsenic from it, and applie other tests, which proved beyond all doubt the existence of arsenic. We conclude, therefore, tha it caused death. We then examined the ol woman. The stomach was quite empty. We examined some of the coating of the stomach and a proportion of the liver. In each we found distinct traces of arsenic. Finding arsenic in the liver leads to the supposition that it must have been taken in a large quantity. I have no doubt about it.

Mr. R. Clowes, surgeon of Statham, after fully corroborating the testimony of Mr. Firth, said—I attended Balls a few hours previous to his death He was purging and vomiting, and complained of pain about his stomach. I only suspected at the time that he had taken some improper diet. The son-in-law informed me the next morning that he was dead. I did not at the time suspect he had come to his death by unfair means. On Monday last, after his body had been exhumed, I made a post-mortem examination, removed the stomach, and carried it home. I subjected a portion of the stomach to a chemical analysis, and found it contained a large portion of arsenic, which was undoubtedly the cause of death. I also examined the stomach of Anne Elizabeth Pestle, the little girl, and the appearances were similar to those of Balls, There was arsenic found in the stomach quite sufficient to cause death.

The three daughters of Balls—Mrs. Pestle, Mrs. Green, and Mrs. Peggs—were then called in by the coroner, who observed that he did not know what turn the case would have taken, and therefore he thought it best not to examine them on oath. He had called them in to give them an opportunity o making any statement they might desire.

They expressed every willingness to further th investigation, and Mrs. Pestle reiterated her forme statement. She was sure the arsenic which sh purchased some years ago was destroyed. Th sticks, cake, poker, and playthings of the little gi were put into her father's coffin, according to hi urgent request.

Mrs. Green, one of the daughters, also made statement, and the officer of the court announcing that he had no further witnesses, the coroner proceeded to sum up the evidence. He thought th facts did not fix upon any party so as to warran them in sending the case to another tribunal. I any one was inculpated, the finger of suspicion most certainly pointed to the deceased Jonathan Balls, and he was beyond the reach of the law. He recommended them to return such a verdict as would enable the officers to have the matter further inquired into, should such circumstances arise as required it.

The jury then found, after half an hour's consultation, "That the deceased, Jonathan Balls, Elizabeth Balls, Samuel Pestle, and Anne Elizabeth Pestle, died from the effects of poison, but how administered there was no evidence to show."

A SELECT PRACTICAL FORMULARY.

Translated from the French of M. Foy, Principal Pharmacien to the Hospital Saint Louis, at Paris.

TAFFETAS OF ENGLAND (Court Plaister).—A solution of isinglass in alcohol, spread upon rose or black taffetas, and aromatised with the tincture of the balsam of Peru.

TAFFETAS, BLISTERING (Codex).—Four parts of oil of cantharides obtained by ether, eight parts of yellow wax, mixed together by means of a gentle heat, and spread on linen or waxed taffetas.

TAKAOLI, TAKALI, OR TAGALI.—Extracts bearing one of these names are found in some druggists' shops. They are proposed as succedanea for the extract of bark.

TAMARINDS (Pulp).—One to three drachms in bolus or pills. Half an ounce to two ounces suspended in a quart of water. Cooling and refreshing; it is given in febrile and hepatic affections. In the form of decoction it acts as a laxative.

TANSY, POWDER.—One to three drachms in bolus or pills. *Infusion*, one to two drachms to a quart of boiling water. *Distilled water*, one to four ounces as the vehicle of potions, mixtures, &c. Tansy possesses tonic, stimulant, emmenagogue, and anthelmintic properties.

TANNATE OF LEAD.—A product obtained by pouring the liquid acetate of lead into a decoction of oak-bark. Used in the form of pommade (see Pommades) in cases of white swellings, gangrenous wounds, &c.

TANNIN, POWDER.—One to five grains and more, as a tonic; six to eight grains and more, in bolus or pills, as an astringent: a very energetic astringent, employed with advantage in all mucous discharges, &c., especially in metrorrhagia, after the inflammatory action has been removed by blood-letting.

TAPIOCA.—The fecula of the root of the Jatropha manioc, employed as an analeptic.

TARTRATE OF POTASH, ACID.—Two to four drachms in a pint of eau sucrée, as a cooling remedy: half an ounce to an ounce in six or eight ounces of water as a purgative.

TARTRATE OF ANTIMONY AND POTASH.—*Internally*: As an emetic, one to three grains, sometimes from six to ten, in solution, in three glassesful of distilled water, which are given at intervals of half an hour. If the first two are sufficient to provoke vomiting, the fluid is not exhibited. The last efforts at vomiting are much aided by causing the patient to drink freely of warm water. In painter's colic three grains are given the first day, and six the next. As a purgative, half a grain to a grain in a quart of veal-broth, herb-soup, &c. In this case it is sometimes combined with from two to four drachms of the sulphate of soda or magnesia. (See emeto-cathartic) In cases of apoplexy, or comatose affections, it is exhibited in the form of enema, in the dose of from three to eight grains in ten or twelve ounces of water. In tetanus, from eight to twelve grains in an appropriate draught or julep. As a contra-stimulant, from six to twenty grains and more in solution in orange-flower water. Tartar-emetic has also, it is said, been successfully injected into the veins in catalepsy. *Externally*: As an anti-arthritic, twenty-four grains, and sometimes half a drachm or a drachm, incorporated in a plaster of Bergundy-pitch. The application of this plaster on the skin generally causes an eruption of isolated pustules, analogous to those of small-pox. In cases of hooping-cough, see Autenreith's pommade. In the form of bath from one to two ounces.

Tartarised antimony is the emetic *par excellence*: it is employed daily, in small doses, to free the primæ viæ, in all bilious affections. Administered in large doses, it acts as a violent poison, and may cause severe inflammation of the alimentary canal. Continued during a certain time, and given in very large doses (from twenty, to forty grains daily) and at short intervals—for example, one hour—tartar-emetic gives rise to other phenomena than those of vomiting. The appetite, and cutaneous transpiration, appear to increase, while the pulse becomes slower with the diminution of its strength, and the perspiration seems to be continual. Nevertheless, the medicine ultimately becomes repugnant to the patient, and the vomiting returns.

Laennec, and many other practitioners, having ascertained that tartarised antimony possessed the power of increasing absorption, exhibited it in fractional doses, so as to produce continual nausea, in the treatment of phthisis pulmonalis, in cases of tubercular degeneration of the pleura, of the peritoneum and liver, and in chronic glandular enlargements.*

Its efficacy as a contra-stimulant has been equally attested in the treatment of pneumonia, bronchitis, jaundice, hepatitis, and generally in all parenchymatous inflammations, when antiphlogistics have failed, or else cannot be employed. Tetanus, acute auricular rheumatism, comatose affections, labours rendered difficult by rigidity of the cervix uteri, narcotism, apoplexy, and painters' colic, have often yielded to the exhibition of tartar-emetic.

Applied externally, tartarised antimony possesses well-marked irritant and revulsive properties, from which great advantage has been derived in the treatment of hooping-cough, acute pneumonia and pleurisy, articular rheumatism, gout, severe abdominal pains, caused by inflammatory tumours situated in the iliac fossa, &c. It has also been used in the form of bath in cases of lumbago, tartrous eruptions, and pruritus unconnected with a specific cause Dr. Fontaneilles has employed it advantageously externally in concentrated solution (see solution of tartar-emetic) in acute, but not very severe, cutaneous affections, and simple phlegmon, milk swellings of the breast, and as a topical application on the forehead in cases of severe headache.

* It has been successfully employed by Mr. Guthrie in effecting the absorption of the pus in cases of onyx.—TRANS.

A rich farmer, labouring under hypochondriasis, was persuaded by his friends that he was bewitched. He accordingly consulted a physician, and gravely informed him that he had seven devils in his body. "Only seven." "No, Sir, only seven." The physician, perceiving the mental condition of his patient, promised to cure him in seven days, and drive out a devil every morning for 20 francs a piece. The farmer consented, and received a powerful shock from an electric apparatus. "There's one gone," exclaimed the physician. The next day the same plan was adopted, and so continued until the seven days were elapsed, when the bewitched patient declared himself cured, and willingly paid the fee, which was immediately bestowed in charity.

Angelique Cottin, the electrical impostor, has met with a rival in the person of a cabin-boy of Havre, whose performances in her peculiar line so closely resemble those she has been exhibiting, that some persons supposed Angelique was masquerading in boy's clothes.

GOSSIP OF THE WEEK.

Royal College of Surgeons.—The following gentlemen were admitted members of this college on Friday, May 15, 1846: Messrs. J. S. Reeve, T. J. Sturt, P. M. Duncan, F. B. Fulcher; J. Laferelle; J. S. Fletcher; F. T. Clay; E. H. Mockler. Mr. Thomas Graham passed as a naval surgeon.

Apothecaries' Hall.—Gentlemen admitted Licentiates on the 14th May, 1846: John William Williams, Metcalfe Johnson, Richard Gravely, William Andrews, William Henry Pilkington.

Dr. Fife has resigned the appointment of physician to the Sunderland Infirmary, and that of physician to the Infirmary at Seaham Harbour.

Mr. William Bowman has been elected assistant surgeon to the London Ophthalmic Hospital.

Obituary.—Lately, at Vienna, the Baron von Dürkheim, President of the Board of Health for the Austrian Empire; May 5th, aged 30, Samuel Leigh, Esq., surgeon, of Ellesmere; 5th, E. H. Hodgson, Esq., surgeon, Burton-upon-Trent; 11th, at Oxford, aged 59, Charles Wingfield, Esq., surgeon to the Oxford Infirmary; 30th ult., at Stow-on-the-Wold, Gloucestershire, Mr. John Darby Charles, surgeon, late of Orchard-street, Portman-square.

Appointments.—Surgeons: H. Trevan, M.D., to the Favourite, vice Newman, to the Dædalus; G. Mackey, M.D., to the Avenger; A. Armstrong, M.D. (assistant), to Haslar Hospital; J. Robinson, M.D. (assistant), to the Avenger; R. Wallis, M.D. (assistant), to the Retribution; J. W. Slight (assistant), to the Victory. War-office, May 19, 6th Regiment of Foot: Staff Surg. of the Second Class Peter Robertson, M.D., to be surgeon; Assist.-Surg. John William Mostyn, M.D., from the Staff, to be assist.-surg. Royal Sussex Light Infantry Militia: George Weeks, gent., to be surgeon's mate, with the rank of lieut., vice Milward Rogers, deceased. 2nd Somerset Regt. of Militia: John Frederick Nichols, gent., to be ensign and assist.-surg., vice Nicholls, resigned.

Quackery in France.—Dr. Bouyer states, in the *Gazette Médicale*, that an itinerant quack, named Chauvenet, who can neither read nor write, and who sells coloured Eau de Cologne in the public places, collecting his audiences by the sound of the trumpet, was in 1845 honoured (?) with the diploma of *Officier de Santé* by the faculty of Montpellier, and the diploma of corresponding member of the Medico-Chirurgical Society of the same city. The diploma of officier de santé bears the signatures of Messrs. Golfin, Delmas, and Risueno d'Amador, all of them professors of the faculty, and the other diploma is signed by Messrs. Hubert Rodrigues, the president, Lutteraud, and Rancoulet. M. Risueno d'Amador is, we believe, a homœopathic practitioner. Chauvenet, it appears, obtained the diploma of officier de santé, after undergoing three examinations (?) by the professors, and on the faith of a certificate of six years' study given by M. H. Rodrigues, who, the quack states, wrote for him, on his dictation, the thesis on the pathology of the eye, which obtained him the diploma of corresponding member of the Medico-Chirurgical Society. Truly, the faculty and the Medico-Chirurgical Society of Montpellier are highly honoured by their savants. The facts are so monstrous that the authorities supposed that the diploma had been illegally obtained, either by purchase or by theft, and commenced proceedings against Chauvenet; but the preceding facts having been ascertained, the fellow was set free.

Illegal Practice of Medicine.—A druggist (pharmacien), at Montrouge, in France, has recently been fined for the illegal practice of medicine. It appears that an old man, feeling himself ill, sent to him for some medicine, and the druggist, after hearing the details of his illness, sent him some calomel, sulphate of quinine, nitre, syrup of asparagus tops, and centaury. The patient, however, got worse, and died, and the matter was taken up by the authorities. The body was examined, and it was found that enteritis was the cause of death. The medical evidence stated that the remedies exhibited would increase the disease under which the old man laboured, and render it fatal, and the druggist was sentenced to pay a fine of 15 francs for the illegal practice of medicine, and another of 100 francs for homicide by imprudence. He was also condemned to pay 500 francs as damages to the widow, making in all about £25.

In consequence of the repeated attacks on the University of Giessen, Dr. Wilbrandt, the rector, has published in the *Grossh. Hess. Zeitung*, a declaration that, in accordance with a resolution of the faculty, the diploma of doctor in medicine will not in future be conferred on any foreigner, without his personal attendance, and his undergoing the requisite examinations. Dr. Bond's occupation is therefore gone, for which both he and the profession have to thank the Medical Times.

A singular disease, characterised by muscular pains and contractions, has broken out in the principal prisons of Belgium. Dr. Mareska and Dr. Grislain have drawn the attention of the medical society of Ghent to this disease. It commences by prickings and numbness of the limbs, followed by cramps, extending from the elbows to the tips of the fingers, and from the knees to the toes. The fingers are drawn in to the palms of the hands, and the hands flexed on the forearms, and the same takes place in the lower extremities. In some cases the cramps and contractions also affect the muscles of the trunk, and even the diaphragm and stomach.

The Society of Sciences, Arts, and Letters, of Hainault, proposes a prize for the best essay containing an historical account of the operation for artificial pupil, from its invention to the present time. The different operations are to be described, and the advantages and inconveniences of each stated. Communications are to be sent, post-free, to M. Mathieu, the perpetual secretary, before the 1st of January, 1847.

Lunatic Asylums.—Great opposition prevails throughout the country to the recent act of Parliament, 8th and 9th Victoria, directing the Justices of the Peace to make and enforce the payment of rates for the establishment of Pauper Lunatic Asylums. The magistrates of Wiltshire have just stated, in reply to several memorials received from various parishes in the county, that it was not imperative to commence the building of the asylum within three years; before which time the memorialists expect to procure either a repeal of the act, or such alterations and modifications as will partly relieve them from the enormous expense necessary for the purpose of the erection of the asylum and maintenance of the lunatics, which, judging from the calculations made by the Lancaster people for the erection of two asylums, and the maintenance of the lunatics, and that of the one now in full operation, will amount to about £33,198 per annum for that large county. It was found that the expense of 600 lunatics in the Lancaster Asylum, for the year 1844-5, exceeded £10,800. One of the Magistrates of Wiltshire, at the meeting above alluded to, stated that to carry out the act in question, would itself be an act of lunacy.

Religious Opinions of Medical Men.—A writer, in the *British and Foreign Medical Review*, remarks that the charge of heterodoxy and atheism has been brought against philosophers and especially physicians, from time immemorial. The "Beware of Philosophy," of the priest is much more ancient than the "*cave canem*" of the Romans. It is quite true that many philosophers (and medical practitioners are to be classed with them) hold opinions differing from the popular belief, and on this difference the charge of atheism has been ignorantly founded. Of those absurd dogmas which medical practitioners, especially in Catholic nations, are categorically required at once to believe and explain, Sir Thomas Browne, in his Religio Medici, humourously remarks: "There are a bundle of curiosities not only in philosophy but in divinity, proposed and discussed by men of supposed abilities which indeed are not worthy our serious studies; pieces only fit to be placed in Pantagruel's library." The materialism of the medical practitioner is often no materialism at all, but only a dissent from the Pagan doctrines that have crept in among the Christian. His habit of dissection, his knowledge that the phenomena of mind, so far as we are able to understand them, are dependant upon organisation; the constant proofs he has of a far more profound scheme of creation than the generality of divines teach, or than he can fathom; and that frequent illumination of the vast abyss of life which science has disclosed to him by her own lightning flashes, all tend to impress his mind with the greatness of his ignorance, and the necessity of faith. "Where fools rush in he fears to tread. "We are men, and we know not (scientifically) how; there is some thing in us that can be without us, and will be after us; though it is strange that it hath no history."

The Honourable Board of Directors of the East India Company, contemplate sending out immediately several assistant surgeons in their service to fill up the several vacancies occasioned by death and promotion.

M. Raspail, an important course of lectures by whom was published some time since in the *Medical Times*, has recently been summoned before the eighth chamber of the Tribunal Correctionelle of the Seine at the instance of M. Orfila and M. Fouquier, for the illegal practice of medicine. It would appear that M. Raspail has not taken out his degree at the Academy of Medicine. The hearing of the case was adjourned for a week, to allow him to prepare his defence.

Petrifaction of Animals and Vegetables by Means of a Peculiar Process, the Invention of Dr. Silvestri, of Naples.—An opportunity has been afforded us lately of examining, though not very carefully or minutely, certain specimens of animal and vegetable bodies, altered, or, as it were, converted into a substance of a stony hardness by a process, the invention of an ingenious foreign physician, Dr. Silvestri. The inventor is a man of genius, and merits every encouragement; candour, however, obliges us to state, that in our opinion the process must be greatly improved before it can possibly serve any practical purpose. Many of the substances petrified lose both form and colour, and, as at present employed, it is, or seems to be, wholly inapplicable to minute structures, such as the texture of the brain, eye, membranes, &c. We have no doubt, however, that the inventor of the process will be able in time greatly to improve it, and we shall be happy to hear of and witness his success.

Pauper Lunatic Asylums.—The Monmouth board of guardians have petitioned Parliament against the operations of the New Lunatic Act, inasmuch as idiocy is not a disease, as lunacy or insanity, but a malformation from birth, and therefore unaffected by remedial means; it states that two-thirds of the 16,000 so called pauper lunatics, reported to be in England and Wales, are idiots, kept and well attended to in the union workhouses.

MORTALITY TABLE,

For the week ending May 16, 1846

Causes of Death.	Total.	Average of 5 summers	Average of 5 years
All Causes . .	838	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	121	162	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	89	98	101
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	152	155	157
Diseases of the Lungs, and of the other Organs of Respiration	246	271	294
Diseases of the Heart and Blood-vessels . . .	31	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	81	65	72
Diseases of the Kidneys, &c.	13	7	7
Childbirth, Diseases of the Uterus, &c.	6	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	10	6	7
Diseases of the Skin, Cellular Tissues, &c.	1	1	2
Old Age	38	60	67
Violence, Privation, Cold, and Intemperance .	49	25	26

No. 348. SUMMARY. May 30.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

(From our own Correspondent.)

ACADEMY OF SCIENCES.

Meeting of 18th May, 1846; M. Mathieu in the Chair.

Composition of the Blood in Health and Disease, by Drs. Becquerel and Rodier.—In this new series of researches, the authors have chiefly sought to guard the analytical inquirer against a cause of error hitherto unnoticed, and to investigate more closely than heretofore the composition of the serum in the physiological and in the pathological state. In the first place the essayists show the necessity of preserving the blood for analysis in hermetically closed vessels, in order to prevent the errors which might arise from the evaporation or absorption of watery vapour. They have ascertained that the specific gravity of the serum does not always correspond with the amount of dissolved solid matter. Thus an excess of dissolved albumen does not cause a proportionate increase of specific weight. It is the augmentation of the saline and extractive elements of the serum to which its density is chiefly to be attributed. The authors proceed to state that the impoverishment of the blood due to protracted disease or repeated venesection, bears particularly upon its albuminous principles; that out of 1000 parts in weight of serum, 90 are formed by its solid components, and 30 of these consist of albumen; that the average density of that liquid is 1027·5, and their remarks are closed by some observations on the diminution of the albumen in pregnancy, typhoid and puerperal fevers, Bright's kidney, and disease of the heart, and on the singular increase of the albumen detected almost constantly in spinal disease.

Toxicology.—Poisoning by Arsenic treated with Magnesia, by M. Bussy.—M. Bussy rejects altogether the animal charcoal recently recommended in the treatment of poisoning by arsenic, and considers magnesia a far more powerful antidote, inasmuch as it combines readily with the arsenious acid, forming an insoluble and inert compound. Tartar emetic, salts of copper, and corrosive sublimate are also decomposed by magnesia; and the exhibition of this substance is, therefore, in M. Bussy's opinion, indicated in all cases where the symptoms can be referred to any one of the above-named toxic agents. M. Bussy is also inclined to think that the salts containing vegetable alkalies, such as strychnia, morphia, &c., being also decomposed by magnesia, their noxious influence might be in some measure mitigated by the timely administration of the substance under consideration.

Physiology.—M. Boudlot informs the Academy that, after many unsuccessful attempts, he has at length been able to produce in dogs fistulous passages furnishing pure bile, without interfering with the health of the animals. If this has really been effected, a new field is open to investigations of the use and composition of bile.

ACADEMY OF MEDICINE.

Meeting of May 19th, 1846; Dr. Roche in the Chair.

THE PLAGUE.

M. Dubois (d'Amiens) presented to the Academy in a remarkable communication the reasons which made him secede from the commission. His speech took up nearly the whole meeting, and its importance does not permit us to pass it over without noticing it at some length. The following is an abstract of his remarks:—

In presenting numerous objections to the extensive and important report brought before the Academy by the commission to which I have the honour of belonging, I shall doubtless, Gentlemen, incur some disfavour; but, as the reporter has already informed you, the commission was divided in opinion on many points of the subject, and the minority signed the conclusions with the understanding that they would be at full liberty to lay before the Academy the views which they endeavoured in vain to uphold in the meetings of the commission. This is at the same time an obligation and a right; it is a right, because in accepting our share of the labours of your commission, we did not by any means abandon our freedom of thought; it is an obligation, because the plague and quarantine questions are of equal interest to the physician and to the citizen. I will, at starting, acknowledge that the report read by M. Prus is a conscientious and considerable exposition of the matter; but its very extent and complexity cause it to embrace questions which should have been waived, and to swerve from the object we had principally in view. The question we had to answer was well limited and well circumscribed; your reporter himself has expressed it in the following manner. "Is the plague transmissible out of epidemic centres? Is it to be feared that the pestilential epidemic may be produced in France by the importation of a few cases of plague?" This, I repeat, was the entire question. The Academy, the Government, the Chambers, the country, asked from us for an answer merely to those questions, and it is to these the attention of the commission should have been solely directed. At our first meeting I made a formal motion tending thus to circumscribe the subject; it was not adopted, and the reporter was consequently authorised not to make properly what may be called a *report*, but a *monograph*, on the plague—an excellent monograph, undoubtedly, one which required much labour, time, and talent, but which, on account of its thirty practical conclusions, and its thirty scientific deductions, will perhaps give rise to a never-ending discussion. Two of the three great divisions of the report might have been altogether left out, without injuring the lucidity of the matter with respect to the solution of the problem we had to solve. Such was also the opinion of Professor Adelon, who more than once stated his opinion that the report began only at its fifteenth conclusion. The majority of your commission established as a principle that the producing causes of the plague might be reduced to three sections: 1. Conditions relative to the unwholesomeness of the affected localities and to the misery of their inhabitants; 2. Conditions referable to the epidemic constitution of the atmosphere; and 3. To the patients themselves, and their action on healthy persons. Now, if we look into the report, we find that of these three morbific causes of the plague, the first and second have been totally neglected; and have given rise in the report to no applications whatever, and to no practical deductions—a peremptory proof that they need not have been mentioned. I fully concur in the first assertion, that the development of spontaneous plague can be properly attributed to several predetermined conditions acting simultaneously upon a considerable part of the population, such as physical and moral destitution, unwholesome and insufficient diet, insalubrious dwellings, &c.; and here illustrations were readily at hand. Lower Egypt presents all these conditions: all the travellers who have visited that unhappy country unite in a loud expression of pity or indignation. The reporter, in the moving picture he has drawn of it, has therefore not gone beyond the truth. But how is it that, after describing the dwellings, or rather the lairs, of the wretched fellahs, built with mud and bones—after depicting the rags which cover imperfectly their waist and shoulders—after telling us that wheat, maize, and healthy meat are the monopoly of the rich Egyptian, and that the remainder of the population cannot touch corn but to cultivate it—after informing us that instead of bread the fellah is fed on cotton seeds and powdered date-stones,—after stating that when his master vouchsafes to give him animal food, that food consists in the offals of diseased cattle—how is it, I say, that after asserting all these facts, the commission, through its reporter, hastens to disculpate the Egyptian government from the odium of all these calamities? I am aware of the circumspection with which a body like this Academy should speak of a sovereign living in amity with France, but it would have been better to have said nothing of the matter. For my part, I will not endeavour to conceal that I think, when any country is afflicted with such horrible misery, the blame must fall upon its governors. I have read the high-sounding correspondence, which mentions the intentions of Mehemet Ali at last to do something for the improvement of the country; but I have a very limited degree of confidence in the civilising genius of the Turks; those letters were written for the purpose of being circulated in Europe, and I know by experience how matters are carried on in the lands submitted to Eastern despotism. Some thousands of fellahs will be got together, they will be overloaded with labour—they will die in hundreds, and then the triumphant news will be spread all over Europe that Egypt possesses model-villages superior to anything we can boast of in our continent.

The second part of the report refers to the epidemic pestilential constitution. The reporter states, and in this we agree, that an epidemic is a ma-

which attacks a large number of individuals at the same season, and in the same place; but the reporter goes farther, and states that epidemics are besides characterised by five special features, which I must consider as totally insignificant.—In the first place, epidemics are said to present three periods—of invasion, status, and decline. This, I may venture to say, is a truism: for once granted that, like other maladies, the plague, from time to time, attacks a large number of persons, I should like to know what is the epidemic which has neither invasion, status, nor decline, and how this can be made out to be a special character of epidemics? A second character of epidemics, according to the commission, is that, during their progress, the average number of other complaints, usually observed in the same climate, is materially diminished, and the endemic maladies are modified in their course and symptoms by the prevailing disorder. This is an error which was generally adopted before its fallacy was demonstrated by observation of what [illegible] place during the cholera. As a third remark- [illegible] ature of epidemics, the reporter states that [illegible] persons who escape infection are not wholly free from the morbid influence of the epidemic constitution. This has been altogether denied by Desgenettes, with reference to the plague, and besides, must we not take into consideration the prevailing terrors of the public, by which each person is induced to watch solicitously every little trifling pain or suffering, which, at any other time, would have passed unnoticed? As a fourth distinctive character of epidemics, we are informed that they reappear and cease at the same seasons; now, with the reporter's leave, this is characteristic of endemic, not of epidemic disorders. Lastly, we are told that epidemics are ushered in by premonitory maladies; these are, it must be acknowledged, most unfaithful forerunners; they may not exist, and being, as the commission says, more or less serious, and more or less general, it follows that most populations have a right to fancy themselves, at all times, threatened with the outbreak of an epidemic. As we proceed with the report, we find that a sixth character of epidemic plague is brought forward, viz., that it is communicable, which sporadic plague is stated not to be. Now, we find, in the practical conclusions, that physicians shall be appointed to reside in the seaport towns of the Levant, whose business it will be to state if the plague is or is not epidemic, and accordingly t deliver to our ships clean or foul bills of health Now, do you think that the medical officer will have recourse to your five characters? I may beforehand assert that he will consult merely public opinion. He will inquire if the plague has in a given time attacked a large number of persons, and the theory of the commission will have the fate of all unsound th[illegible]t will be of no practical utility.

Let us now examine the third and most important part of the report—*influence exercised by pestiferous patients*. The words of the report are the following:—"Is the plague transmissible out of epidemic centres?" This is perhaps the most important of all the questions suggested by the subject. If answered in the affirmative, the present quarantine system must be preserved; if in the negative, the lazarettoes should be done away with. Now, the commission has answered this question with the most decided, explicit, and peremptory affirmative. The inevitable consequence must therefore be that the commission does not by any means condemn the quarantines and lazarettoes. But what is most singular is that the commission boasts of not adopting "contagionist" opinions. Since the days of Fracastorius four modes of contagion have been admitted: inoculation, contact, vicinity, and communication through the use of clothes, *quæ apta sunt conservare seminaria prima contagionis*. Such have been in Europe the prevailing doctrines on the propagation of contagious maladies, and it is against these four sources that the lazaretto and quarantine regulations are chiefly directed. But, in the first pages of the report, we find that the signification of the word contagion has been by the commission circumscribed to the transmission resulting from contact in the open air, and, taking this as a starting point, the commission was desirous of declaring its disbelief in contagion. But Professor Bégin, with his usual good sense, remarked how extremely singular it would be if in the same breath the report declared that the plague is not contagious, and yet that it is sufficient to approach the bedside of a patient to catch the infection, and that a single pestiferous individual might import the disorder into one of our sea-ports. In order to avoid this difficulty, M. Bégin proposed to say nothing whatever about contagion; but in a report on the plague, such an omission is something unheard of. The consequence has been that many persons, not hearing the word contagion mentioned, concluded that the commission did not believe in it, and thus gave the commissaries a reputation of radicalism, which they were very far from deserving. The commission, indeed, is more friendly to the doctrine of contagion than the Egyptian physicians themselves. The report speaks of moveable centres of infection—of the miasmata impregnating a room, the hold of a ship, &c., by which a long series of sufferers may be produced. As to the cases brought forward to prove these doctrines—cases of which M. Prus has found thirty-three—they may be in reality reduced to four, none of the others referring to instances in which it is demonstrated that the plague was not communicated in a centre of epidemic infection. Even these four cases can only cause doubt, but they do not by any means prove that the plague can be transmitted out of the centres of infection. Is it not besides a remarkable fact that a commission composed of eleven zealous members of the Academy, after more than one year's active researches—after gathering all the evidence possible on the subject—after conning over the official documents—and carrying their investigations farther back than one century—has succeeded in bringing up *only four* cases in support of the opinion that the plague is contagious in European lazarettoes. Four cases! one of which is wanting in the most necessary details, and the others bear upon persons who have had doubtful symptoms, and who were observe through telescopes, or rather through the magnifying glass of terror.

It is necessary to visit Marseilles to know wha prejudice is entertained on the subject. I visite that city in August last, and I found the people en slaved by the most absurd prejudices on every poin connected with contagious diseases. The recollections of the plague of 1720 are still vivid in Marseilles, and at sight of its port it is easy to understand the violence of the scourge. The most fetid emanations constantly arise from the basin, and the muddy dark appearance of its waters contrasts with the proverbially clear waves of the Mediterranean Nothing has been done to clear this port; large sums of money are expended to bring pure water into Marseilles, but its inhabitants do not appear to attach much importance to the respiration of untainted air. Let us now in a few words examine the practical conclusions of the report. The commission has not thought proper to offer any practical deductions from the lengthened study of the influence of unhealthy localities on the propagation of the plague, not even with regard to the only French port in connection with the Levant. The improvement of the port of Marseilles is not even hinted at. The practical conclusions, in fact, are nothing but a new series of regulations for the lazarettoes. I do not, in resuming my seat, wish to leave the impression that it is my desire to see the report mutilated. No; I propose merely that, in the first part, the improvement of the port of Marseilles be proposed, and the expressions exonerating the Egyptian government omitted. I do not; in the second part, propose any change, except, perhaps, some qualification of the five characters of epidemics; but the third part of the report, in my opinion, should be entirely remodelled. The observations it contains are not sufficiently cogent to authorise this Society to express so absolute an opinion as that of the contagiousness of the plague out of epidemic centres, and consequently to support the lazaretto and quarantine system in any but a provisional manner. The scientific question is at present undecided, and the Academy cannot pronounce.

The remainder of the meeting was taken up by the following remarks of M. Rochoux:—Our sanitary organisation is entirely based upon a system of contagion, first promulgated by the poet-physician, Fracastorius, and once adopted it became the source of the most unreasonable consequences, *posito uno absurdo multa sequuntur*. The contagionists were naturally driven to propose and to adopt supposed preservative measures, of which it is difficult to say whether they were most atrocious or absurd. Thus, not only lazarettoes and quarantines of all sorts were established, but villages were burnt down when affected with the plague (*cremata est villa, una cum familiâ cujus erat, quæque ibi se receperat; Gassendi*). The priests exhibited the sacrament at the end of a stick three feet in length to save themselves from infection. The son was obliged to inform on his father when struck with the plague. It was forbidden, under penalty of death, to bear any assistance to shipwrecked travellers coming from the east, and, according to Fodéré, Bonaparte, landing at Fréjus without a "permis," should have been instantly shot. We have heard, in 1831, of a ship suspected of having cholera on board kept off by the guns of the port, where she was seeking a refuge from the tempest. A contagious disease, in my opinion, is that transmitted, no matter how, from a diseased to a healthy person. Although connected by one common link, contagious diseases may be divided into two classes, with regard to the degree of activity of the morbid poison by which they are produced. Some have a persisting virus, very difficult of destruction—syphilis, variola, rabies, farcy, &c; others have a much weaker virus. These are the various kinds of typhus amongst which we place the plague—the typhus of camps, nosocomial typhus, and typhus amaril, erroneously confounded with yellow fever. The germ of the latter disease requires the assistance of a certain number of external conditions, in the absence of which their intensity decreases and dies away. As to sporadic plague, if it is not contagious, I must say it should be considered as quite a different disease from epidemic plague. That difference by itself places a wide chasm between them. As the incontestible consequence of the report, it appears to me that all must acknowledge that the plague, generated by infection, shows itself contagious like the other varieties of typhus. Like them, it is capable of producing the greatest ravages by the influence of extraneous causes, such as crowding, &c, and like them loses its contagiousness, and disappears by the dispersion of the patients, proper ventilation, and good hygienic regulations.

The meeting adjourned at half-past five.

HOPITAL DE LA PITIE.

Clinical Lecture on Diseases of the Spinal Cord, by M. Gendrin.

We have already on various occasions, Gentlemen, directed your attention to the all-important diagnosis of the seat of disease in spinal affections. Two patients are at present in the wards, who illustrate powerfully our remarks on the subject, and furnish us with good examples of myelitis. We shall endeavour to show why the treatment employed in these cases before their admission into hospital proved unsuccessful, and why the method instituted in our wards, after a positive diagnosis of the seat and nature of the affection, has, on the contrary, been productive of a speedy improvement.

The first patient is a man, aged sixty, of a dilapidated constitution. When he was admitted, three months since, into our wards, he had been ill for two years. During the first eighteen months he had suffered from the usual symptoms of myelitis, i. e., paralysis of the legs, of the rectum, and of the bladder. This state of things had been stationary for about eight or ten weeks, when the right superior eyelid became paralysed, and also the right cheek. External strabismus was present, and the features deviated to the left. The inferior extremities were the seat of lancination and tingling pains. We referred all these symptoms to disease of the origin of the medullary cords, and consequently applied our instruments of derivation to the infra-occipital region. Mercury was exhibited internally, so as to bring on stomatitis. This treatment has been perseveringly followed up for three months, and you can now judge of its effects. The eyelid has regained its mobility, and the patient has recovered so far the use of his legs that he now walks about the gardens without assistance. Stra-

bismus has almost ceased; a complete cure may be foretold within a very short period.

Our second patient is a woman, aged forty-eight, of a good constitution, and admitted a fortnight since into hospital. For the last six months she has lost all power over her inferior extremities, and two months since the left superior eyelid dropped and external strabismus came on. These two last symptoms, characteristic of paralysis of the third pair of nerves, were accompanied with a deep-seated headache, and a sensation of weight in the spinal column. The same treatment has been used as in the former case; fifteen days only have passed, and the legs are gaining every day in strength, and the left eyelid can now be raised under the influence of volition.

Let us now compare these two cases with simple paraplegia. In this affection the paralysis begins in the feet with formication, coldness, weakness in station, impossibility of regulating the movements of progression. It gains successively the abdominal regions, the muscles of the pelvis, abdomen, chest, and at last the superior extremities. The disease gains gradually in extent, and the progress of paralysis indicates, and permits us to follow the progress of internal mischief. Now, this you do not observe in the two cases we have just related. The first period of their illness is like that of common paraplegia, but the second period is marked in both by paralysis of nerves belonging to the upper portion of the nervous system. In one you have noticed paralysis of the third pair, and of the portio dura; in the other of the third pair only. How is it that a disease of the central nervous system, producing at first only paralysis of the inferior extremities, has suddenly occasioned a lateral paralysis at the superior extremity of the cerebro-spinal axis? You will easily answer that question by referring to the connection of paralysis with the internal lesions by which it is caused. All the medullary affections which can occasion paralysis are produced from below, upwards, no matter what may be the anatomical seat of the injury, from the pons varolii to the cauda equina. Disorder of the nervous centre, above the medulla oblongata, produces, on the contrary, a descending, not an ascending, paralysis. The consequence of this clinical fact is that paralysis, limited to the feet, for instance, may just as well be produced by disease of the bulb as of the dorsal region of the cord. It is only very recently that we had in our wards a case of caries of the cervical vertebræ, accompanied with incomplete paralysis of the feet only. Very limited disease of the spinal cord produces by its progress ascending extension of the paralysis, without therefore extending to a greater portion of the spinal substance. But if anatomical change of structure of the medulla spinalis may be manifested only by paralysis of the legs; it also produces a special action on those nerves emanating directly from the affected spot. Thus, in caries of the seventh or eighth dorsal vertebræ, for instance, when the cord begins to suffer, incomplete paralysis of the feet is observed, together with complete loss of power over the bladder and rectum. Why?—because the nerves which influence the excretions of urine and fæces are affected at their origin, whereas the nerves of the extremities are only affected through the intermediate agency of the spinal cord.

If, now, we apply the above data to the two cases we related at the beginning of this lecture, you will easily understand the apparent anomaly of the symptoms. In both the spinal cord was affected at its superior origin, and the first effect of that lesion was to produce paralysis, ascending gradually along the inferior extremities. The medullary disease progressing, at last implicated the third pair of nerves at their origin, or their course along the tentorium cerebelli—a fact which was immediately expressed by paralysis of the upper eyelid, and of all the orbital muscles, with the exception of the rectus externus. Some fifteen years ago I published in the annotations to my translation of Dr. Abercrombie's work on Diseases of the Brain and Spinal Cord a case very similar to those under consideration. The paralysis of the muscles of the third pair had been caused by extension of chronic inflammation to the basilar arachnoid over the origin of the third pair of nerves. The principal practical consideration to be deduced from the foregoing lecture is, that a rational analysis of all the symptoms must lead to a precise diagnosis of the seat of spinal affections. On the importance of the diagnosis we need not insist; it must not only guide you in your prognosis, but in your treatment and point out to you the limits to be assigned to the activity of your therapeutic agents in each particular case.

DAN. M'CARTHY, D.M.P.

Spain.

ANATOMICO-PATHOLOGICAL OBSERVATIONS UPON PHTHISIS.

By D. José Seco Baldor.

(Continued from page 160)

Case 10.—*Pleuro-pneumonia of both Sides: Incipient Tuberculization of both Lungs. (Effusion of) reddish Serum into the left Pleura and the Pericardium. Hypertrophy of the Heart; Endocarditis.*

A dragoon, aged twenty-one, tall and slender, had, previously to his entrance into the army, in October, 1832, been occupied in field-labour. Great fatigue and pain in the chest were the result of his horse-exercise, subsequently. After five weeks' residence in the infirmary of his regiment, he was transferred, in the commencement of March, 1833, to the Military Hospital of Mompeller.

16th.—Three cauteries applied to the præcordial region. To this, all his pains were referred.

His condition, on the 18th, was the following: heat of skin natural; pulse small, thread-like, irregular, sometimes very frequent, sometimes slow; pulsations of the heart strong, rapid, and confused; cough frequent, with muco sanguinolent and frothy expectoration; breathing very difficult; respiratory murmur augmented over the whole right side, natural and clear in the anterior part of the left; and mixed with crepitous *râle* in the lateral and posterior regions: sound of the thoracic parietes everywhere clear; intellectual faculties undisturbed; tongue red in its circumference, without other symptom of gastric derangement. Three grains of powder of digitalis, for three doses.

19th.—Respiration less laborious; pulsations of the heart reduced in strength; (radial) pulse confused; respiratory murmur clear anteriorly on both sides; and mingled with crepitous *râle* in both lateral and scapular regions.

20th.—Breathing confused, almost imperceptible: strokes of the heart much hurried: sputa sanguinolent, and of the colour of wine-dregs. Two bloodlettings, of eight and sixteen ounces, respectively.

21st.—Pulse perceptible, though small; dyspnœa relieved: expectoration less bloody. Thirty leeches to the breast.

22nd.—Generally relieved. Respiratory murmur extinct in the left posterior region.

23rd.—Patient worse. Dyspnœa aggravated; expectoration more bloody; and pulse less perceptible: pulsations of the heart very frequent and disorderly.

24th.—Œdema of the lower limbs. Respiratory murmur evident and clear, anteriorly, in the superior half of the right side, and over the whole left. Crepitous *râle* in both sides and scapular region, but less audible in the latter: sound obscure in both. Orthopnœa: sputa consisting almost wholly of blood. Pulsation of the radial arteries imperceptible. At three o'clock, p.m., failure of the sentient and intellectual faculties: death, at four on the following morning.

NECROTOMY, TWENTY-EIGHT HOURS AFTER DEATH.

Exterior.—Marasmus in the second stage. Œdema of the lower limbs. Præcordial region sensibly depressed.

Thorax.—Right lung universally adherent. Between the costal and pulmonary pleura, an adventitious membrane, one line in thickness, and readily separable from the pleuræ; which were everywhere thickened, and, in some parts, red and injected. The pulmonary parenchyma hepatized in its posterior half; which contained nine small tubercles. Anterior half sound, with the exception of some points which exhibited inflammation in the first stage. Left lung adherent to the contiguous parts; at its base;—to the diaphragm only by one pseudo-membranous band. In the cavity of this side, a great quantity of reddish serum. Parenchyma of the lung hepatized in its two posterior thirds; sound, in the greater portion of the anterior, especially below. Some tubercles dispersed through the hepatized portion, particularly at the vertex. Between the pericardium and internal surface of this lung, a tubercular mass, of the volume of a nut. The bronchia of both lungs red and injected. Bronchial glands somewhat enlarged.

Pericardium thrust upward and anteriorly by the fluid contained in the left thoracic cavity; towards which it was inclined by its adhesion to the lung: it contained four ounces of bloody serum. The heart, flattened from before backwards, presented a circular form of three inches and a-half in diameter in every direction. The serous membrane investing it, was torn from the parenchyma with great facility. Its external surface presented a livid hue, closely resembling that of wine-lees. The parietes of the left ventricle were hypertrophied, and from an inch to an inch and a-half in thickness. In the lower part of its cavity was collected a quantity of violet-coloured, consistent and homogeneous pus. The whole was covered by false membrane which penetrated into all the interstices of the columnæ carneæ, and presented numerous blind cavities corresponding to the hollows in which they had been moulded. In the external paries was a livid spot, of the size of a sixpence. The right ventricle contained a large black coagulum, and some vestiges of pseudo-membrane like that in the left.

REFLECTIONS.

Here, the cause of tuberculization was the inflammation of the parenchyma of the lungs. This is proved by the nascent condition of the tubercles, their scanty number after so many months of suffering, and their existence in the most inflamed portion (of the lung). It is probable that the pleurisy had been developed previously to the pneumonia; and the former been preceded by the endocarditis and pericarditis, the apparent causes of the hypertrophy of the heart.

From the constitution of this subject, it may be inferred that, sooner or later, he would have died phthisical; even had he not entered the army. Doubtless, the horse-exercise prematurely destroyed him by inducing the cardiac and pleuro-pulmonic inflammations; and, consecutively, the hypertrophy of the heart and tuberculization of the lungs.

Other soldiers, at Mompeller, had complained of breast-affections from horse-exercise. But this effect is not so frequently observed in the Spanish (as in the French) cavalry: doubtless, because the pace of the Spanish horses is more light and easy than that of the French.

The degree of cold to which the Spanish soldiers are exposed, might probably have also contributed, in the present case, to the production of the fatal phlegmasia of the thoracic organs.

Case 11.—*Chronic Pulmonary Catarrh: Pulmonary Tubercles: Chronic Pleuropneumonia: Aneurism of the left Ventricle of the Heart.*

A man, aged twenty-seven, fair, tall, thin, and narrow-chested, originally an agricultural labourer, afterwards, a soldier, in consequence of having got wet in November, 1834, contracted pulmonary catarrh; which continued until the beginning of January, 1835. Restored to his wonted health and vigour, he, in December of the same year, from exposure to night-air, suffered another attack of catarrh more violent than the first. The principal symptoms, according to his own report, then were, cough, at first dry, and subsequently accompanied by mucous expectoration, sometimes pure, at others, mixed with blood; pain in the sternum and epigastrium, on coughing; occasional oppression and sense of pricking in the throat, head-ach, anorexy, thirst, and fever, aggravated during night. After eight days, the fever declined; the cough was more easy, and mucus thicker. Yet neither these symptoms, nor the prickling in the throat, yielded to any treatment. In March, the debility and emaciation were observed to increase. The patient ate little, and expectorated copiously. There was, then, oppression in the breast, and general heat, especially after taking food, and during the night. From this period, the patient gradually declined; losing, daily, his colour, flesh, and strength. Dyspnœa and fever

aggravated; with, occasionally, acute pains in the shoulder and left side.

July 5, 1836, admitted into the Military Hospital of Lavapies, in the following condition:—Paleness of the face and whole surface; extreme debility and emaciation; cough, with profuse muco-purulent expectoration; great dyspnœa; almost total immobility of the ribs; mucous râle over the whole right side, more audible in the superior than the inferior regions; sonorous in the superior half of the anterior left part; sibilous in the inferior half of the same part; and mucous in the lateral and posterior. Respiration cavernous, with pectoriloquy, in the left anterior region, from the nipple upwards; obscure from the same point downwards; extinct in all the lateral parts, and in the lower three fourths of the posterior; cavernous, with pectoriloquy, in the superior fourth; obscure, or extinct, over the whole right side, especially in the anterior and lateral parts. Sound dull in the two superior thirds of the left anterior part, and in all the lateral; clear in the lower third of the anterior part, and in all the posterior; natural over the whole right side. Low fever; skin dry and rough; sleep broken by the cough, night-sweats; appetite gone; great thirst; tongue moist, white in the centre and red in the circumference; diarrhœa, pain in both ears; intellectual faculties unimpaired. Diet of rice and broth; Sydenham's white decoction; an opiate pill at night.

Day-break of 10th, violent dyspnœa, with difficulty of speech. Cold perspirations, followed by death.

NECROTOMY, TEN HOURS AFTER DEATH

Exterior.—Perfect emaciation: muscles pale and atrophied.

Thorax.—Left lung strongly adherent to the contiguous parts. Pleura, white, opaque, thickened, especially the pulmonary portion. Greater part of the lung, particularly the anterior half, condensed, and equal, in firmness, to liver. In its superior and posterior part, a cavern, capable of containing an orange; of a grey-reddish colour, intersected by divers bands and columns resembling blood-vessels. Below, other smaller caverns, especially in the anterior half, which was partly converted into a tubercular mass. In the posterior half, also full of insulated tubercles and tubercular masses, some points accessible to the air. Obstruction and induration of the parenchyma, gradually encreasing posteriorly. Issue of sero-purulent fluid from the incised surfaces.

Right lung adherent, by bands, to the ribs;—and by false membrane, to the pericardium. Pleura thickened and of a whitish colour, with patches of recent red injection. In the cavity, a pint of transparent serum, with small portions of thick pus so deposited as to form a sort of purulent fillet on the margins of the lung. Nearly the whole of the superior and middle lobes indurated, and full of tubercles, the vertex alone crepitous. Much blood accumulated in the inferior lobe, with minute tubercles, but without induration, or softening, of structure. On incision of the superior and middle lobes, an issue of the same fluid, equally copious as from the left lung. An escape of sanguineous and frothy serum from the inferior lobe.

The whole membrane of the air passages, including that of the larynx, of a livid red-colour, and softened in various points, but without ulceration. Purulent mucus in trachea and bronchia. The bronchial glands tuberculated, some, in a state of induration; others suppurating.

The cavity of the left ventricle of the heart larger, and containing more coagula of black blood, than the right.

Livid spots in the gastric mucous membrane. Sanguineous injection of various points of the small intestine and colon.

REFLECTIONS.

This patient had enjoyed good health, and experienced no thoracic affection, until the winter of 1834; when he suffered from pulmonary catarrh. From this, he recovered without cough or other vestige of disease, so that no tubercles had then been developed in the lungs.

In the following winter, he was attacked with constipation, chronic catarrh and other alarming symptoms of an affection of the parenchyma of the lungs and pleura: and, his constitution indicating a predisposition to phthisis, it was evident that the second catarrh had given rise to the development of tubercles in the lungs.

On the admission of the patient into the hospital, auscultation, assisted by other exploratory means, detected with unusual clearness, and precision, the actual condition of the bronchia, lungs, and pleuræ. Mucous or sibilous or sonorous râle was, in fact, perceptible in the whole thorax; and, on dissection, was found a general chronic bronchitis implicating even the larynx itself. Respiration was cavernous over the whole left superior region, and pectoriloquy also existed there: and, consequently, a large and almost empty cavern was discovered in the superior lobe of the left lung. The absence, or obscurity, of the respiratory murmur over greater part of the thorax, concurred perfectly with the obstructed condition of the lungs, and empyema of the right side.

The sound of the thoracic parietes did not correspond with the signs detected by auscultation, and the real condition of the contained organs. This frequently occurs in phthisical subjects, where marasmus is far advanced. But the sound of the emaciated thorax is very different from that of the cavity covered with thick parietes, and containing healthy and pervious lungs.

At all events, this case serves to demonstrate that pulmonary catarrh may precede phthisis, and become its exciting cause. The predisposition to the disease, in all cases, a necessary condition, existed here. In the interval,—about a year,—between the two catarrhs from which the patient suffered, he had been quite well. Consequently, it cannot be suspected that tubercles could then have existed in the lungs, and much less that they had induced the catarrh. On the contrary, everything conspires to prove that the repetition of the catarrh occasioned the tubercalization of the lungs and bronchial glands, to which the patient was predisposed.

Bayle and Laennec, who first denied the influence attributed by almost all physicians, to pulmonary catarrh, in the development of phthisis, would probably have contended, that, in this case, the tubercles had lain dormant, and in a germinating condition, previously to the occurrence of the catarrh; and that it had, in no way, contributed to their development. Such an hypothesis, however, would be perfectly gratuitous; and even, if well-founded, affords no proof that the tubercles were the cause, rather than effect, of the catarrh; since it obviously proceeded from cold, its ordinary source.

CASE 12.—*Chronic Pulmonary Catarrh. Gastro ataxic Fever. Three Bronchial Glands tuberculous. Eleven Miliary Tubercles in the Superior Pulmonary Lobes.*

A man, aged twenty-two, thin, and of dark complexion, was received in the Hospital of Lavapies, in the spring of 1836, for chronic pulmonary catarrh contracted in the march from Cordova, his native place, to the military depôt. On his admission, he had frequent and troublesome cough, with copious, thick, but not purulent, expectoration; a sense of tickling and heat in the trachea and larynx; voice somewhat hoarse. Respiration was free, yet slightly anhelous, according to the quantity of mucus contained in the air-passages. Not more pain in the chest than that ordinarily attendant on an obstinate cough. No decided fever; but, on some evenings, a slight increase in the frequency of the pulse, with augmentation of heat of the skin, and flushing of the face. Appetite regular; no thirst; intellectual faculties, and intestinal functions, unimpaired. No increase of weakness or emaciation. The patient, every day, left his bed. The thorax sounded well in all its regions; mucous and sibilous râle were detected only in some points, particularly the subclavicular regions.

In the beginning of June, much relief had been obtained from a milk-diet, mucilaginous drinks, narcotics, repeated blisters, and from the influence of the then genial atmospheric temperature.

June 11.—Evening.—Complained of head-ache, general lassitude, thirst and loss of appetite, with fever. Low diet; orangeade with gum sedatives discontinued.

12.—Morning.—Lassitude, and pain in the head, accompanied by a sense of weight, worse. Skin hot and dry, pulse frequent; thirst intense; perfect repugnance to broth; unpleasant taste, with dryness, in the mouth; tongue arid, somewhat cracked and of a grey-red colour: slight nausea; pain on pressure of epigastrium; belly constipated; urine scanty and hot; respiration somewhat difficult; cough generally dry: posture indiscriminate. Blood-letting, of eight ounces: emollient cataplasms to the epigastrium; laxatives. Evening.—No relief. Twelve leeches to epigastrium.

13.—State unchanged. Another blood-letting, of eight ounces.

14.—Head less painful, but sense of weight not relieved. Epigastric pain gone; tongue moist; thirst less urgent: nausea removed; pulse reduced in frequency; skin less harsh and dry: expectoration less copious and difficult. Diet continued; with cooling drinks, laxatives and cataplasms.

15 and 16.—Symptoms nearly the same. Head somewhat clearer.

17.—Awoke better. Had slept four hours. Thirst almost gone; pulse slightly febrile; tongue and countenance nearly natural; skin moist. Bowels had been moved, several times, every day, by the laxatives.

18.—Received, from home, intelligence of the death of a brother. Evening, much fever; frontal cephalalgy worse than ever; eyes injected; face drawn; great thirst; mouth and tongue dry, dyspnœa; expectoration suppressed. Bloodletting, of eight ounces. During the night, delirium continuing to the 19th. Twelve leeches behind the ears, without relief.

20.—Delirium continued. Countenance destitute of expression; eyes in perpetual motion, look wandering, vague, and inattentive. Pulse very quick; skin hot and dry; slight subsultus tendinum; thirst unabated. Ten leeches to the neck; sinapisms to the lower limbs; lotions of oxycrat to the forehead, with care to observe their influence on the pulmonary affection.

21.—No alteration.

22.—Much prostration (of strength); incipient stupor; senses of vision and hearing impaired; tongue dry, red, and smooth; pain in the epigastrium on pressure. Blisters to the calves.

23.—Encrease of prostration and stupor.

25.—Utter loss of consciousness. Death in the night.

NECROTOMY, TWENTY-EIGHT HOURS AFTER DEATH.

Head.—Vessels of pia mater greatly injected: red points in the cerebral substance, wherever cut: a small quantity of reddish serum in the lateral ventricles.

Thorax.—The tracheo-bronchial mucous membrane red, thickened, and, in many places, softened, and slightly smeared with thick mucus. Three of the bronchial glands enlarged, indurated, and tuberculous. Seven miliary tubercles in the superior lobe of the right lung, and four, in the corresponding lobe of the left. Pulmonary parenchyma sound, with the exception of sanguineo-serous congestion in the posterior part. Pleura quite healthy and unadherent.

Abdomen. Stomach dilated, its mucous membrane, of a rose colour, dotted with numerous red points, and smeared with mucus. Intestines containing much yellow bile; and, in many points, injected with blood.

REFLECTIONS.

This subject obviously became affected with chronic inflammation of the tracheo-bronchial membrane, incurred on his march to the military depot. After recovering from this, he was attacked with gastro-intestinal phlegmasia which powerfully acted upon the brain, and rendered acute the affection of the respiratory passages. The symptoms of the new malady had been conspicuously relieved by the antiphlogistic treatment; when they were reproduced by moral causes operating directly on the brain. This fresh shock the patient could not withstand. Traces of the gastro-cerebral affection, and of the catarrh which had passed from the chronic to the acute stage, were found upon dissection.

Conjointly, with these lesions, were discovered three tuberculated glands, and eleven tubercles in the superior pulmonary lobes. It cannot be supposed that the catarrh was posterior (in date) to the tubercles, and excited by them. The patient left home in perfect health, and fell ill by the way—an

accident very likely to befall a person migrating, in spring, from the climate of Cordova to that of Madrid. During the progress of this catarrh, he was cut off by an acute disease; and incipient tuberculization was discovered in the bronchial glands, and lungs. Is it not obvious that the catarrh had been excited by its ordinary cause, and had preceded the tuberculization? Nothing is more probable—more consistent with sound physiology—than that an inflamed state of the mucous membrane of the bronchia should induce tuberculization of the neighbouring glands, and of the pulmonary parenchyma itself. The nascent condition of the tubercles, their small number, and the site occupied by them in the superior lobes, are little favourable to the opinions of Laennec and his disciples. This author, doubtless incited by a spirit of opposition to the doctrines of Broussais, goes so far as to contend that phlegmasia of the bronchial membrane does not exercise the same influence upon the bronchial glands, as that of the intestinal, on the mesenteric. In the present case, however, he would have found it difficult to sustain this singular opinion.

(To be continued.)

England.

Fracture of the Lower Third of the Radius.—In the *Provincial Medical and Surgical Journal*, Mr. Bartrum briefly records eleven cases of fracture of the lower third of the radius, the seat of fracture in all being very nearly between the insertion of the pronator radii teres and the upper edge of the pronator quadratus, within the space between the second and third inches from the wrist, where, he says, *a priori*, it could hardly have been expected from the thickness and strength of the bone. Some of the recorded causes of the fracture were apparently from muscular effort; one man broke the bone while lifting a sack of wheat; another while at work lifting a stone, another while raising a block with a lever, and another while pitching hay. In two cases the injury was caused by a fall, and in one instance it depended on the apparently trifling accident of knocking the arm against a basket in the street. Mr. Bartrum thinks from the special locality of the fracture in all these cases, there must be some common cause of weakness at the part where the bone gave way. The symptoms presented by such cases are most simple: the patients complain that some days before they sprained the arm, they know not how, yet can remember that at some certain hour they felt great weakness in the spot mentioned; occasionally they notice the grating, and draw attention to it. On examination some slight swelling marks the seat of injury; if it has happened some days before applying to the surgeon, the crepitus cannot be heard except under varied and somewhat rough manipulation. The fractured ends are often so little disturbed, that the arm may be used in the lighter occupations, but cannot bear any strain or weight. The treatment consists of a starched roller, or softened millboard splint, retained for three or four weeks, the subsequent period before resuming work varying in some degree according to the vigour of body and mind.

[The following are the only articles of interest to the profession in the last three numbers of the *Medical Gazette*.]

Disease of the Cervix Uteri.—Dr. Oldham describes two cases of disease of the cervix uteri, one of malignant fungoid character, and the other a case of chronic ulceration and hypertrophy. He prefaces the detail of the cases by observing that the cervix uteri is defective in animal sensibility, the spinal nerves being sparingly supplied to it; and consequently the diseases of that part, especially at their commencement, are frequently painless. The neck of the womb has also a lower degree of organisation than the body. Its texture is harder, more compact, and more resistant; it is also less vascular. One of the effects of this low organisation is that the reparative actions are feeble and slow. Indurations of this part, or deposits of any kind, are removed with difficulty. The power of the absorbents is languid, and cannot readily be quickened. The cervix is often called the glandular part of the womb, as though it was endowed peculiarly with this structure; but this is a mistake. There are numerous large crypts in it, many of them quite visible to the naked eye, and they secrete a clear tenacious mucus. The openings of these crypts are very apt to be closed, and the mucus then collects in the sac, which becomes raised on the surface, forming round smooth projections, which Naboth mistook for ova; and hence they have been called ova Nabothi. These crypts are seen well developed in pregnancy, when their viscid mucus plugs up the mouth and neck of the womb. The independence which exists between the cervix and the body of the womb, is seen in the difference of their functions. The uterus, as an organ, performs two functions. It incubates the ovum, and gives out the menstrual flux. In carrying out the first function, the cavity of the womb becomes lined by the decidua; which stop quite short at the cervix. There is a line, a trenchant well-defined limit, marking off the products of the one from the other. During menstruation, too, it is only the cavity of the womb which supplies the blood, which flows directly from veins which open on its surface. The cervix does not yield a drop. This independence is also apparent in the diseases of the two. The affections of one part rarely run into the other. One of the results of the low organisation of the cervix is, that, like the pyloric extremity of the stomach, it is frequently the seat of malignant disease.—The subject of the fungoid growth from the cervix uteri was a dark-haired woman, thirty-seven years of age, the mother of three children. The disease was apparently of ten months' duration, and commenced by severe back-ache, with copious leucorrhœa, followed by a discharge like dirty water, which became very offensive, and was so acrimonious as to irritate and burn the external organs. Occasional bleedings soon followed, at first occurring every week or so, but for the last six weeks prior to her being under Dr. Oldham's care, every day or two. Severe lancinating pains about the sacrum, in the vicinity of the womb, and particularly inside the thighs were also experienced. Her health did not appear to be affected. On examination the upper part of the vagina was found to be filled by a growth from the os uteri, which was insensible, but bled on being touched. It was evidently a mass of fungoid disease involving both lips of the womb; there was, however, a small portion of tissue apparently smooth and unaffected, at the highest part of the cervix anteriorly. The growth was deeply fissured, as though springing from separate parts, which had coalesced at their base. The patient was kept in bed, and the diseased growth removed by ligature, and afterwards strong nitric acid was applied to the cervix every third day. A few days afterwards the report was that the size of the cervix was much diminished; it felt fissured to the touch, with a spongy surface. The discharge was scanty. The shooting pains in the sacrum and the numb sensation in the left hip had returned. The history of the case is not carried further, but Dr. Oldham observes that its details illustrate very well this form of malignant disease. It is a species of soft cancer, to which the term fungoid may well be applied. The amount of solid tissue in it is very scanty; it is in fact made up of a semi-transparent cell-membrane, which is quite full of large capillary vessels. If these vessels are emptied by either dividing them, or after death, a growth which before had been of large volume is reduced to a mere cellular web. In this case, the ligature enclosed a good-sized mass, but when it came away it held only a few loose shreds of tissue; it sprung from the entire circle of the os uteri, having thus a broad and extended base. This is by far the most common situation of fungoid cancer of the womb, although it is not the invariable one. When it springs from the cavity of the womb it first distends it, then it opens and dilates the os and cervix, and swells out in the vagina: sometimes this process is gradual and slow, but may occur quite suddenly. When fungoid cancer grows from the os uteri, it is enclosed within the vagina, and if the walls of the canal are lax, as they usually are in women who have borne children, they do not impede or cramp the growth, but allow it to spread out and distend the passage. Malignant tumours generally are much restrained in their development by firm and resisting structures, and if the vagina be rigid, it will shape and contract these fungoid growths. In this case the vagina was relaxed, and the tumour filled the upper part of it, which readily yielded to its increase. When examined it was found insensible to the touch, moveable, with an irregular granulated surface, and its tissue was so infirm as to generally occasion bleeding. Dr. Oldham next comments on the presence of leucorrhœa, and observes that a white, or it may be, a yellowish discharge, more or less profuse, is one of the most common and early signs of structural disease of the cervix. He adds that a leucorrhœa suddenly setting in, in a woman in fair health, or a leucorrhœa which does not yield to ordinary remedies, is generally only a symptom of some structural disease; it may be in the cervix, or the vagina, or the vulva, but it ought to be sought for by examination, and treated accordingly. In the case under notice, had the woman been examined when the leucorrhœa was the prominent symptom, the fungoid growth would in all probability have been found just sprouting forth, before the deeper structures of the cervix were implicated, and when far more and perhaps even permanent benefit might have been afforded. With regard to the treatment, in such a case as that just described, palliatives only could be employed; even the operation would only act in that manner; the disease was too far advanced for a permanent cure to be effected. Dr. Oldham, however, believes that in the early stage the disease may be effectually cured by the removal of the abnormal growth, and the subsequent application of nitric acid to the cervix. The second case was one of hypertrophy and ulceration of the neck of the womb, occurring in a female, thirty-one years of age, suffering from the effects of miscarriage, to which she was subject. The cervix was considerably enlarged, and had sunk to within two inches and a half of the vulva. The ulceration was cured by the repeated application of nitrate of silver, and Dr. Oldham, at the date of the report, intended to employ iodine vaginal suppositories, to effect, if possible, the reduction of the enlarged cervix. He felt reluctant to employ the powerful caustics recommended by Dr. H. Bennet, as they would implant a new and very unyielding cicatrix-tissue in the cervix, which in case of subsequent pregnancy would dangerously prolong the first stage of labour.

Paracentesis Thoracis.—Dr. Hughes says the operation of paracentesis is so simple that it might be performed with advantage much more frequently than it is, in cases which will certainly prove ultimately fatal, but in which the patient suffers from the mechanical effect of a large quantity of fluid. When much distress arises from this cause, he has seen great relief afforded by the withdrawal of some of the fluid. The forms of disease in which the operation is most likely to be called for under these circumstances, are empyema accompanied with phthisis; some few cases of simple pneumothorax; other cases of pneumothorax with gradually progressive effusion, in which the weight of the fluid considerably adds to the distress of the patient; cases of symptomatic hydrothorax, arising from disease of the heart or lungs; and cases of sero-sanguineous effusion connected with malignant disease of the pleura. In such forms of the disease the operation is not and cannot be expected to save life. These remarks are supported by the narration of two cases, one of malignant disease, and the other of phthisis with pleuritic effusion.

Tumours of the Face.—Mr. Crompton narrates two cases of tumours of the face. The first was that of a boy four years of age, who had a tumour in the right cheek of two years' duration. It was firm, elastic, and not painful, even on firm pressure. The teeth of the upper jaw, and the alveolar process of the right superior maxilla, were all sound, and firmly planted. They were pressed inwards by the long-continued growth of the tumour, nearly to what ought to have been the centre of the palate, the right palatine plate apparently not having been developed; the teeth and palate did not constitute any part of the tumour. The malar bone and zygoma were both pushed outwards. The orbital plate, and about the breadth of the finger below the inferior ridge of the orbit, were sound and undis-

turbed. The tumour had grown down low enough to cause the teeth and the right half of the lower jaw to be pressed inwards, so as to correspond with the state of the upper jaw; the mouth was drawn down by the length of the tumour, which reached below the level of the lower jaw. The mucous membrane of the mouth was healthy, except where the teeth of the lower jaw had pressed upon it, and there the membrane presented the white appearance that is usual when superficial ulceration takes place from such a cause. The palate felt quite firm and natural, but the tumour could be felt by the fingers placed in the mouth passing backwards to the fauces, still firm and elastic; and when both hands were used, one outside, the other inside the mouth, it appeared to be somewhat moveable. Mr. Crompton removed the diseased growth by operation. He began the incision (the whole skin and integuments of the cheek being healthy and moveable over the tumour) at the zygoma, and continued it down obliquely to about half an inch below the angle of the mouth in its present drawn position, missing the commissure of the lips and orbicularis oris muscle by about half an inch. The incision passed down at once upon the tumour, which was white and firm in texture; it was bound down by the zygomatic muscles expanded over it, which were divided, and the fingers could then be pushed with some difficulty round the lower portion of the tumour, so as in some measure to enucleate it. The upper portion was pretty firmly attached to the prominence of the malar bone, under which and the zygoma it passed, and was firmly impacted. By careful dissection upon the finger nail, the tumour was detached from the mucous membrane of the mouth, leaving the latter at this stage of the operation intact. It was then found that the tumour passed within the coronoid process of the lower jaw, and under the zygoma, and backward to the external pterygoid process and sphenoid fossa, from which it was detached partly with the fingers and partly with the knife. Some bleeding ensued when it was quite separated, which was arrested by pressure. The wound was dressed, and the boy did well. The tumour, on section, presented a firm white appearance, something like the fibrous tumours of the uterus. It was about the size of a St. Michael's orange, with two smaller appendages, each as large as a walnut. The second case was one of tumour of the left antrum, of some duration. Mr. Crompton removed the disease by operation, and the wound healed, almost entirely by the first intention. The tumour upon section appeared to be white, firm, elastic, and fibrous, without bony spiculæ in its substance; it just filled the antrum, and was moulded to its shape. It sprung from the alveolar surface of the antrum and palatine plate.

Injuries about the Elbow.—Mr. Brown has published a communication on the disproportionately severe consequences of slight injuries about the point of the elbow. He observes that in working men, and more especially in miners, it almost constantly happens, that comparatively slight injuries to the point of the elbow are followed by consequences which are quite disproportioned in severity to the extent of the original lesion. A man receives a blow on his elbow which produces a slight abrasion. The individual continues to work, and in a day or two applies to the surgeon, with immense swelling and intense redness around the elbow, accompanied by great pain, tenderness, and heat, extending all the way down the forearm and hand. Frequently there is enlargement of the upper part of the arm, especially along the course of the lymphatics, and the axillary glands are affected. On examining the injury itself, a mere crust is found, showing that the inflamed state of the part has rapidly dried up the little wound. In other cases, where there is a more severe cut into the elbow, the same consequences ensue, but in an aggravated degree. Here, also, the wound closes more speedily than is natural, and a scab forms, under which there will, perhaps, be found that there is some moisture and purulent matter. In some cases, in addition to the other consequences already described, the bursa over the olecranon becomes inflamed, enlarged to the size of an egg, and very tensely distended. This symptom, however, though frequent, is far from being constant; but, in the classes of persons alluded to, the other symptoms almost invariably occur, whether the injury be of a trifling nature or otherwise. The number of cases of this description which occur in Mr. Brown's neighbourhood is truly remarkable. In another set of cases, Mr. Brown has witnessed the occurrence of the results just described independently of any blow or accident whatever, but as arising from the tardy formation of a boil on the point of the elbow. The treatment should be as simple, but, at the same time, as effective as possible. Thus the arm should be kept perfectly at rest, and elevated in a sling. The best application to the wound itself is the milder mercurial ointment spread on thin lint. Then the elbow and the greater part of the forearm should be enveloped in a large poultice of bran or oatmeal, which ought to be hot and moist, and changed tolerably often. Hot fomentations may be applied to the entire limb whenever the poultices are changed. The required purposes will thus be answered quite as well as they would be by the plan adopted in some hospitals, for the cure of superficial inflammation, of enveloping the part in fomentation flannels, surrounded with taffeta. A purgative or two should be given at first to subdue the general disturbance of the system. As the activity of the inflammation yields, the heat, redness, and tension subside, and the swollen parts become œdematous, it is desirable to apply some stimulant to the hand and forearm; for this purpose, a camphorated ointment, with or without mercurial ointment, according to the nature of the case, may be employed, or a turpentine liniment, carbonised by sulphuric acid, may be used. The lint, spread with mercurial ointment, may still continue to be applied to the elbow. In those cases where the bursa is also enlarged, it is first necessary to subdue the diffused inflammation, swelling, &c. The bursa is then found remaining as a tense round pouch or tumour. Mr. Brown generally orders the free inunction of tartar emetic ointment over this tumour, to be employed night and morning. He regards this plan as less troublesome and more efficacious than the application of the blistering solution of iodine, as recommended by Lugol and Mr. Liston, in cases of synovial and other enlargements. He considers that the application of one or two common blisters would probably answer the desired end: but is of opinion that even this plan would be more painful and less simple than the inunction of the tartar emetic ointment.

Fungoid Tumour of the Abdominal Parietes.—A case of extensive fungoid tumour of the parietes of the abdomen is reported from the Westminster Hospital. The patient was an iron-founder, and he referred the origin of the disease to lifting heavy weights. About nine days before death the tumour ulcerated, and gave rise to considerable hemorrhage. The examination of the body after death showed that the disease was almost, if not entirely confined to the abdominal walls. It weighed nine pounds, nine ounces, and proved to be cerebriform cancer.

Poisoning by Opium.—Mr. Mann records a case of poisoning by opium, in which, according to the history, the symptoms of narcotism did not occur until about three hours after the poison had been taken. On this, however, Mr. Taylor throws a doubt; he believes that the laudanum was not drank until a short time before the symptoms of poisoning were noticed. The case terminated fatally.

Multilocular Cystic Dropsy.—Dr. Levernarrates a case of multilocular cystic dropsy, occurring in a married woman, forty-four years of age. She first noticed a fluttering sensation in the left iliac region; after this had lasted two months a hard tumour was felt, followed by swelling of the leg and rapid enlargement of the abdomen, causing much dyspnœa and dysuria. On admission into hospital the urine, which was small in quantity, was passed frequently. Pulse small, feeble; bowels regular. The abdomen, much distended, gave a distinct feeling of fluctuation on percussion, very distinct in front, but not so clear posteriorly; at the upper and left side a hard nodular body could be felt; measurement at epigastric, umbilical, and midway between this and pubic region, gave 35, 41½, and 42 inches. Diuretics, by increasing the urine, caused diminution of these measurements, but there was increased dyspnœa in the erect posture. Her strength declining, she was sent into the country, but was again admitted in about three months, with increased dyspnœa on exertion. The abdomen was irregular, with a projecting cyst below the stomach, and remarkable prominence in the left hypogastric and umbilical regions. Measurements at before-mentioned places, 46½, 48, 46½ inches. Paracentesis was performed; nineteen pints of brown-coloured fluid, with fibrinous particles, were evacuated, and being much relieved she left the hospital. She was admitted in six weeks time, with similar symptoms as before, and at another operation thirty-two and a-half pints of greenish fluid were drawn off. This was soon followed by rigors and abdominal tenderness, probably from inflammation of the cyst, the wound suppurating. The abdomen again enlarging, twenty-six pints of coffee-coloured fluid were drawn off from the cyst, and sixteen from the peritoneal cavity. The operation was well borne, but on the following morning the patient was seized with chilliness and sickness. The tongue was white; pulse quick and flickering, with soreness, but no pain on pressing the abdomen. From this time she sank, and died on the following day. The chief morbid appearances were as follows:—A large multilocular cyst, occupying the whole anterior part of the abdomen, adherent to its walls and the intestines; the chief part of the tumour consisted of large irregular cysts, the most internal being smaller, and filled with tenacious fluid. The peritoneum thickened by old inflammation; intestines also adherent in parts by more recent effusion; their muscular and mucous coats could be readily drawn from each other. The liver softened; its texture, indistinct, was adherent to surrounding parts by old adhesive matter. On microscopic examination of the secretion in the cyst, there appeared two kinds of globules, differing in size; aggregated, they formed opaque white flaky masses in the homogeneous contents of the cells; the contents of the cells were not soluble in ether. As a pendent to this case, he narrates another of malignant disease, which presented some symptoms of encysted dropsy of the ovary. The patient ten months back first felt fulness in the vagina, which sensation increased until her admission. For two months she suffered from pain of a shooting character, extending from the right groin to the hip and back, and not accompanied with any vaginal discharge. On admission her face was anxious; pulse small and quick; the abdomen tympanitic superiorly; was inferiorly full; dull on percussion on the right side; uneven; slight pressure causing pain; on the left side resonant without tenderness. About one and a-half to two inches above the anterior spinous process of ilium two or three rounded bodies were felt, having a restricted motion, and painful when pressed upon; between these and the pelvic brim dulness existed, and distinct fluctuation could be detected. On examination per vaginam the uterus was detected high up, and rather obliquely placed; the os patent, and readily admitting the sound, which was passed three inches; motion of the uterus did not affect the tumour of the right iliac fossa, nor vice versâ. The vaginal canal was obstructed posteriorly by a wedge-shaped swelling, yielding on pressure, which caused slight pain, and evident fluctuation was felt when the hand was placed on the abdominal swelling. The calibre of the rectum was diminished by the tumour of the recto-vaginal septum, and fluctuation was readily detected there as in the vagina. The fluctuation becoming more distinct, a grooved needle was passed through the posterior vaginal wall, and about three ounces of thin serous fluid escaped; more passed afterwards. After this the finger could be passed per rectum more easily than before, but the cyst appeared to be firmly attached or tied down in the recto-vaginal pouch. It (the cyst) could also be detected in the right inguinal region. The sac refilled quickly, and causing by its pressure much inconvenience, was emptied by trocar and canula, of a dark-red coagulable fluid. The health improving after this, she left the hospital. Two months after, the fluid having again formed, twelve ounces were drawn off by canula. A week after this, being exposed to cold and wet, she experienced rigors, succeeded by diarrhœa, cough,

and great exhaustion, with slight pain in the right iliac fossa. Soon after which she sunk. On post-mortem examination the uterus was found filling the cavity of the pelvis, adherent behind to the sacrum and to the sides of the pelvis by extension of the malignant growth. The cavity of the uterus was found small, its walls of dense cartilaginous structure, and adherent externally to a fungoid mass, most probably originating in the left ovary. A large irregular sloughy cavity, with sloughing fungoid walls, existed between the rectum and vagina. An irregular opening, caused by the same disease, existed in the posterior parietes of the bladder. On the right side of the uterus, a large pendulous tumour existed in its external walls; similar hard cartilaginous degenerations affected the pelvic and lumbar glands, and implicated the right sciatic nerves; the cellular tissue around the internal iliacs was condensed, apparently with the same deposit, in the midst of which the coats of the vessels remained entire, and their cavities unobstructed. Parietes of the bladder thickened and congested; its rugæ covered with plastic effusion; an irregular opening, four lines in diameter, led into the cavity before mentioned. Uterus distended; pelves of the kidneys enlarged, and containing puriform urine. Kidneys enlarged; surface contracted, white, and variegated with undefined patches of injection, and minute ecchymoses. On section the cortical portion presented the same appearance; the white degeneration not uniform, the striated appearance corresponding with that on the surface. These appearances appeared to arise from inflammation of the uriniferous tubes, which were filled with inflammatory exudation corpuscles. The uterine disease appeared of two kinds—soft medullary fungus and hard cartilaginous scirrhus. A point of special interest was the development of cysts containing clear serous fluid, and having the cerebriform fungoid masses projecting from the walls. On microscopical examination, the soft medullary tumours were found to be made up of cells with thick walls, containing one, two, or three nucleated cells; the absence of connecting tissue would account for its soft cerebriform character. The hard fibrous parts were cellular, but the cells were not so large or distinct, and imbedded in a firm fibrous connecting tissue, which also contained a number of fat cells. Elongated fusiform cells were also contained in the hard fibrous growth. In respect to the diagnosis in the above cases, the author had always regarded the first as one of multilocular encysted dropsy, but had considered it an affection of the left ovary, which the patient's narration (not always to be depended upon), symptoms and examination tended to confirm; whereas, on careful examination, the right was found affected; but as the most solid part of the cyst was on its left side this might have caused gravitation to the left side of lower abdomen. The second case was viewed as encysted dropsy of the ovary, the cyst falling into the recto-vaginal pouch, and becoming adherent; for, when emptied, the sac did not admit of the slightest movement. Dr. Lever was led to conclude that there were none or but slight abdominal adhesions, from the circumstance that the tumour felt through the abdominal walls was moveable, and the ovoid bodies seated in the upper part descended or ascended as the tumour was emptied or became full. The long stalk by which one of the ovoid bodies was attached to the uterus would account for the immobility of this tumour when motion was imparted to the uterus. The points in the post-mortem appearances which appeared of interest were the extensive and old peritonitis, and the period of its occurrence, the microscopical characters of the morbid parts, and the two-fold disease found in the second case. Another interesting point in this last case was the condition of the urinary organs, both kidney and bladder containing inflammatory products, the fine uriniferous tubes containing exudation globules. As regards the treatment, the author believed paracentesis should never if possible be performed, as he believed the greater number of patients died within three years from its first performance; perhaps it would be preferable, where really necessary, to draw off only a portion of the fluid; for the more frequent the operation, the more quickly does the fluid re-collect, and in proportion enfeeble the patient. In the second case, interference became necessary on account of the distressing symptoms caused by the diminished power over the sphincter ani, and by the pressure on the bladder, urethra, and nerves, the whole of which symptoms were much relieved by the operation.

THE OXIDE OF SILVER.—Mr. Butler Lane has published some further observations embracing his views and experience in the administration of the oxide of silver, originally introduced by him to the notice of the profession. He considers it essentially sedative in its medicinal action. Mr. Lane first speaks of its external application, which he strongly recommends in ulcers of irritable character, and in cases of ophthalmia, where the conjunctiva is chiefly affected, of which he relates several illustrative cases. He considers the oxide of silver ointment as identical with Mr. Guthrie's "black ointment." Mr. Lane then speaks of the internal administration of the medicine, and states his reasons for anticipating less danger of cutaneous discoloration from the use of the oxide, than from that of the nitrate of silver. His argument is founded on the insolubility of the former preparation, and its minor affinity for albumen. He mentions that in upwards of [illegible] cases where he has administered the remedy, no tendency to discoloration has been apparent. The employment of the oxide of silver does not appear to have been attended with a great amount of success in epilepsy, though its administration can evidently be carried to a greater extent than that of the nitrate, with less chance of any unpleasant result; it would, therefore, seem to be more worthy of trial in the intractable disease in question. In hemorrhages of various descriptions, Mr. Lane entertains a high opinion of the utility of the oxide of silver, and this most especially in hemorrhagia. He says it is where the hemorrhage is of secretive character, occasioned by local excitement, that oxide of silver will produce the most decided effect; where the cause is chiefly mechanical from the rupture of blood-vessels, the same advantage will not attend its employment; neither where the hemorrhagic tendency is connected with an imperfect stasis and abnormal tenuity of the blood: in such cases the influence of opium, lead, and tannin is far superior. In irritative dyspepsia, Mr. Lane advises the employment of the oxide of silver, and adduces the testimony of Dr. Golding Bird in its favour. In the atonic variety of disease, he says the medicine is unavailing. In the different forms of pyrosis the oxide of silver has a very beneficial effect. Mr. Lane considers that silver exerts a peculiar influence over the uterine system, with which he partly connects its action in menorrhagia. He asserts that the oxide of silver demonstrates a specific power in controlling certain states of uterine excitement, and whether such excitement be evinced merely locally by undue sensibility or secretion, or by sympathetic pain and constitutional irritation, the sedative influence of the remedy is unfailing. Any primary constitutional derangement has to be counteracted by this treatment, and in some congestive states of the uterus, a mere sedative action not being the chief therapeutic indication, the oxide of silver may not, therefore, be available. Mr. Lane then details several cases of uterine derangement and disease, in which the administration of the oxide of silver had marked efficacy, and in conclusion refers to communications from Dr. Lever and Dr. Frederic Bird, in which the remedial influence of the oxide of silver in uterine affections is warmly advocated.

THE RECTUM TERMINATING IN THE URETHRA.—Dr. Williamson records a case in which the rectum terminated in the urethra. The child having manifested a good deal of uneasiness after birth, it was carefully examined, and it was found that there was imperforate anus. On examination the eye could detect no indication whatever of the presence of an anus. Its usual situation was covered by smooth skin, of the natural colour, continued from the perineum over the buttocks. The raphe of the perineum was unusually prominent, but the penis, scrotum, and testicles, presented no unnatural appearance. The finger being placed on the point where the anus should have been situated, could be readily pushed up to some distance in the natural direction of the rectum, carrying the integuments before it, and conveying the idea that nothing but skin and cellular membrane intervened between the surface and the intestine. There was, however, no projection of this part, even when he cried, nor was it at all discoloured, as has been observed to be the case when the cul-de-sac of the rectum is at no great distance. Urine had been naturally and freely passed, and there was no distension of the abdomen; but vomiting was frequent, and he was evidently suffering much. Dr. Williamson operated, but without being able to discover the rectum, and two days afterwards meconium passed per urethram. The child lived for several months afterwards. The body was examined after death. The lower part of the scrotum was hard, and of a dark purple colour, and there was a firm swelling over the urethra above it. These appearances were ascribed to urinary infiltration. On laying open the abdomen, the colon presented itself of a dark red colour, and so greatly distended as almost entirely to conceal the other viscera. The small intestines were pale and contracted. The sigmoid flexure had no more unnatural appearance than might have been expected to result from its great distension. The rectum passed straight down to the neck of the bladder, which was empty and contracted. At its widest part, which was about its middle, the rectum was six or seven inches in circumference. Dr. Kerr passed a small silver catheter into the bladder, but a straight instrument was found to enter the rectum. There was no inflammatory effusion in the peritoneal cavity. The rectum and bladder were removed, the urethra being divided at its membranous part. The tissue interposed between the lower part of the gut and skin was dense and fatty. The bladder and urethra were opened anteriorly. An aperture leading to the rectum was situated at the anterior part of the prostatic, and beginning of the membranous part of the urethra. It was about a quarter of an inch in diameter, but appeared to have been recently enlarged by ulceration. At each side and behind it, in the situation of the openings of the prostatic ducts, there were several ulcerated spots which had undermined the mucous membrane, and through which, no doubt, the infiltration of the urine had taken place; the mucous membrane was of a dark colour. A projection resembling the great end of the verumontanum looked forward into the communicating duct; it had a distinct lacuna on its surface; the openings of the ejaculatory ducts could not be found, but they terminated perhaps somewhere in the communicating canal, which, in the preparation made of the parts, was not laid open. The rectum was laid open along the meso-rectum. Its coats, and especially the muscular, were greatly hypertrophied. Inferiorly it terminated in a pouch, as if a ligature had been applied to it externally; radii being observed to proceed from a small depression, in which was situated the aperture of communication with the urethra. This opening appeared to be closed by the contact of the folds of the mucous membrane, but it readily gave admission to a common-sized female catheter. The canal leading from the abrupt termination of the rectum to the urethra passed upwards and forwards through the apex of the prostate gland, and did not much exceed half an inch in length. The great intestine contained much thin brown fæces, smelling strongly of putrid urine.

Amongst the promotions in the order of the Legion of Honour we were happy to find the name of Dr. Shrimpton, the only British subject belonging to the French military service. Dr. Shrimpton's commission was given to him in the year 1830, as a recompense for his attendance upon the wounded during the three days of the revolution. Dr. Shrimpton, after serving with distinction in several elevated medical offices in France, is now the commanding medical officer in the hospitals of Dran, Algeria.

The number of students in medicine at the University of Athens last year was seventy-four, that of students in pharmacy twenty-three.

Rhubarb is largely cultivated in the neighbourhood of Brünn, in Austria, and the roots sold for exportation.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

BY G. J. GUTHRIE, F.R.S., &c.

LECTURE IV. (concluded.)

Dr. Post's case of wound of the axillary artery, veins, and nerves, requiring amputation; Secondary hæmorrhage, and ligature of the subclavian above the clavicle; Remarks on the preceding cases; Case of amputation of the arm, followed by secondary hemorrhage, and ligature of the bleeding artery; Occlusion of an arterial branch immediately above or below a ligature placed on the main trunk; Secondary hemorrhage from ulceration of the arteries, in the sloughing state of stumps after amputation; Ligature of the main arterial trunk; Secondary amputation; Treatment of secondary hemorrhage after amputation of the thigh; Treatment of secondary hemorrhage after amputation at the shoulder-joint; Secondary hemorrhage with retraction of the soft parts after amputation, and formation of a conical stump; Opinions of French surgeons on secondary hemorrhage, consecutive to local inflammation, ulceration, or sloughing; Condition of arteries in inflamed parts; Mr. Stanley's case of wound of a branch of the epigastric in the operation for femoral hernia; Case of wound of a branch of the external pudic artery, during the operation for castration; Wounds of the circumflex arteries during amputation at the shoulder-joint; Anatomical description of the axillary artery; The operation for applying a ligature on it; Mr. Quain's case of supposed wound of the axillary artery.

I mislaid in my last lecture the particulars I had written out of Case 80, and was therefore obliged to give only the simple fact of the operation having been done, and having succeeded, I have since found them, and they are as follows:—

Dr. Post, of New York, was called to a ropemaker, who had divided the axillary artery becoming brachial, together with the veins and nerves, by a scythe. The ligature of the artery and the division of the vessels and nerves was followed by mortification of the arm, requiring the operation of amputation, which was performed two inches below the shoulder-joint. The artery which was found in a denuded state, being secured by a second ligature, placed three quarters of an inch above the one part applied to the extremity of the artery in the stump. On the 30th of November, fourteen days after the operation, the patient was awakened by bleeding from the wound; the ligature having come away a day or two before, this was arrested, and there was no return of the bleeding until the 6th of December, when a profuse arterial hemorrhage took place, and the subclavian artery was tied above the clavicle. On the 9th of April he left the hospital, the wound over the clavicle and the stump, the bone of which had exfoliated, being nearly healed.

Remarks.—This patient recovered, whilst No. 76 died of mortification and No. 79 of hemorrhage. The artery, in my opinion, ought to have been secured by an incision through the parts intervening above the vessel, and the ligature placed upon it below the edge of the pectoralis minor, where the artery would, in all probability, have been sound. It would then have been seen whether or not the subscapularis or circumflex arteries brought blood into the main trunk below this ligature, from their collateral connections, and required to be secured. If this operation, a very simple one in such a case had failed, the greater one on the subclavian would have been a resource, and if that had not succeeded, the innominata need not have been spared, when the theory would have been carried out on the most *ultra* principles to that consummation which may be expected from it.

In case No. 84, the operation on the subclavian artery was thoroughly useless; its utter insufficiency is honestly admitted by the operator, and the case should be borne prominently in the recollection of every surgeon. In case No. 85, the ligature on the subclavian artery above the clavicle succeeded in arresting the bleeding from the axillary artery, although the surgeon distinctly states that the opening in this vessel was below the origin of the three great communicating branches with the arteries above, and why the bleeding was not renewed by their bringing blood into the main trunk above the hole in it, no one can tell. It was on a matter of chance that this man's life depended; the surgeon hazarded the risk, and won. Of the four sufferers, the practice pursued failed in three cases; two died, one lost his arm at the shoulder-joint, and one only recovered, and this in the hands of four as able surgeons as any in Europe. If the question were asked, "Is the injury that befel these men in itself so deadly?" my reply would certainly be, "No, the mischief was not so much in the nature of the accident as in the defective nature of the means employed to remedy it. It is the surgical operation which is deadly, and not the injury."

CASE 86.—Corporal Wm. Robinson, 48th Reg., was wounded at the battle of Toulouse by a shell, which rendered the amputation of his right leg necessary, and fractured the humerus of the same side, opening also extensively into the elbow joint. I amputated the arm close to the shoulder joint, on the 1st of May, eighteen days after the injury. At the end of the month there was only a line of incision, the lower part of the wound not being quite cicatrised. The ligatures had all come away regularly. At this part a small abscess formed, and discharged itself in the beginning of June, arising, doubtlessly, from a portion of the tendon of the pectoralis major having sloughed after its separation from the bone by the operation. On his arrival at Plymouth, the little abscess formed again, and was opened on the 2nd of August, 1814, three months after the amputation; and the next day blood flowed so impetuously from this part as to induce the surgeons in charge to open the face of the stump, and to seek for the bleeding vessel, which they could not find, owing to the diseased state of the parts surrounding it. They therefore decided upon placing a ligature on the artery higher up and below the clavicle. The man had been brought from Bordeaux by the late staff surgeon Dease, who had served with me on different occasions, and especially at Toulouse; and the operation was done by Mr. Downing, the deputy inspector of hospitals, who treated him in the manner I had pointed out in the lectures on these operations I had delivered in his of the principal hospitals at Toulouse, after the failure of Case No. 9. An incision, commencing at the centre of the clavicle, was carried down to the inferior part of the axilla, directly through the integuments and the pectoral muscle, the pectoralis minor was then divided, and the artery exposed; two small arteries were tied which had been divided Great difficulty was now experienced, and much time was lost from the want of an aneurismal needle sufficiently firm to keep its curve, which the silver-eyed probe they had would not do. The ligature was however at last placed on the artery, and came away in a reasonable time. Corporal Robinson was forwarded to me afterwards at the York Hospital, Chelsea, and again became the subject of a clinical lecture, given in proof of the advantages to be derived from this mode of operating. The only error committed was in searching for the artery so long in diseased parts on the face of the stump, instead of at once cutting down upon it an inch or more above its extremity, but below the pectoralis minor muscle, which might afterwards have been divided, and the wound enlarged upwards, if it were found necessary. If this operation had not succeeded, the ligature of the subclavian above the clavicle was a further resource, but as the artery was sound, with the exception of the end engaged in the face of the stump, there was no reason why a doubt should be entertained of the success of an operation, which was, in fact, attended with comparatively little risk to the patient.

It is immaterial how many incisions are made in the folds of the arm-pit or around the breast and shoulder, as long as the arm will hang on alive it is to be preserved. Those poor fellows who have survived the most desperate injuries of the kind know well the value of the under use of the arm, although the shoulder should be stiff. Amputation is more over an opprobrium to surgery, which cannot be admitted but as a last resource—as the only means left untried of saving life.

I cannot, then, recede from the opinions formed on these points from the practice of the Peninsular war, and although I regret being obliged to differ from so many highly accomplished and able surgeons, I am obliged to declare that in no case in my opinion is amputation at the shoulder-joint admissible on account of a wound of the axillary artery, unless mortification of the extremity has taken place.

There is a very important point growing out from several of these cases, which must not be overlooked. It is admitted by the facts stated in many of them that the axillary artery was injured below the giving off of the subscapular and circumflex branches to the shoulder and parts around it. If a ligature had been applied on the main artery in cases No. 79, 81, 84, 85, at the part injured in the first instance, it would have been placed either above or below the circumflex arteries. If above them, it would or ought to have permitted the renewal of the bleeding through their collateral connections, and the operation would have been useless. If below them it would have been at the part injured, and a ligature above would have been unnecessary. Whether applied immediately above or below, it is said it would have prevented the consolidation of the artery by its proximity. This is a supposed fact I not only doubt, but entirely disbelieve on the ground of experience, founded on observation. It is a point on which I have ventured for many years to call in question the accuracy of most of my predecessors and contemporaries, and of the unsoundness of which I have given proof. It is my belief that if a ligature were placed on the axillary artery immediately below the origin of the posterior circumflex artery, that the orifice of this vessel would become obstructed in consequence of the extension of inflammation to it at the same time as to the canal of the main trunk. If this small artery were given off half an inch above the ligature, it would in all probability remain pervious, and in an healthy artery (although not in a diseased one), I do not think this degree of proximity would be of the least consequence in preventing the permanent obliteration of the extremity of the canal below it. The point on which a distinct answer must be given is, whether it is safer to apply a ligature immediately below or above the origin of the posterior circumflex artery, having the power of selecting either place? The answer is, It is safer to do so below, for the orifice of the artery will not interfere it may be expected with the consolidation of the main trunk under and above the ligature; while if tied above, the same orifice would open into an exposed and suppurating wound, in which the processes necessary for its closure might not take place. It might then bleed some days after the operation, and render the application of another ligature on the part injured necessary.

In my work on Gunshot Wounds and on the Operations of Amputation I have said, page 302, 3rd. edit., 1827, "In the irritable and sloughing state of stump that has been noticed, hemorrhages frequently take place from the small branches, or from the main trunks of the arteries, in consequence of ulceration; and it is not always easy to discover the bleeding vessel, or when discovered, to secure it on the face of the stump; for, as the ulcerative process has not ceased, and the end of the artery which is to be secured is not sound, no healthy action can take place; the ligature very soon cuts its way through, and the hemorrhage returns as violently as before; or some other branch gives way; another ligature is required, which is equally uncertain; and under this succession of ligatures and hemorrhages the patient dies. Surgeons have, in such cases, preferred cutting down upon the principal artery of the limb, in preference to performing another amputation, even when it is practicable; and they have frequently succeeded in restraining the hemorrhage for a sufficient length of time to allow the stump to resume a more healthy action. This operation, although successful in many cases, will under certain circumstances fail, and amputation become ultimately necessary; but the same objection of want of success may be made to amputation; and on a due comparison of these circum-

stances, I recommend the operation of tying the artery, in most cases, in the first instance; and if that prove unsuccessful, of resorting to amputation; but this practice is by no means to be followed indiscriminately. The artery is to be secured with reference to the mode of operating, as aneurism; but the doctrines of this disease are not to be applied to it, because it is still a wounded vessel with an external opening, which truth I have more than once seen proved to the discomfiture of the surgeon.

"In the thigh the operation is less certain than in the arm, and especially if it be not the main artery that bleeds; for the branch from which the hemorrhage proceeds may come from the profunda, and tying the artery in the groin on such opinion would be doing a serious operation, and one which would probably not succeed, for the anastomosing branches would restore the circulation in the stump in a short time, and again establish the bleeding. If it is the femoral artery that bleeds, and the ligature is applied high, it is very liable to a return of the hemorrhage. To obviate these difficulties, the part from which the bleeding comes should be well studied, and the shortest distance from the stump carefully noted at which compresses on the artery commands the bleeding, and at this spot the ligature should be applied, provided it is not within the sphere of the inflammation of the stump. In case the hemorrhage should only be restrained by pressure above the origin of the profunda, and repeated attempts to secure the vessel on the surface of the stump had failed, I would prefer amputation, when the strength of the patient would bear it, to tying the artery in the groin, which I do not think would be successful; and the patient would be then in a less favourable state for amputation.

"When hemorrhage takes place after amputation at the shoulder-joint, it is a most dangerous occurrence, more particularly if it occurs in consequence of ulceration. In no case is the artery to be struck at by the needle, but an incision is to be made through the integuments and great pectoral muscle, when the artery may be readily exposed, and a ligature placed upon it without difficulty anywhere below the clavicle. If the state of the stump in any of these cases depend upon the bad air of the hospital, I would expose the patient to the inclemency of the weather rather than allow him to remain in it; for I know that the effects of any exposure must be less certainly fatal to the patient than a continuance in an unhealthy atmosphere.

"It often happens, in cases of this kind, that the stump has not united, or in opening out has given rise to a protrusion of the bone, forming a conical stump, the skin has retracted, and the face of the stump, ingranulating, is exposed and becomes irritable. In crowded hospitals, hemorrhage from the face of such a stump is not unfrequent, and often causes a great deal of trouble to the surgeon and much distress to the patient. It is not a direct bleeding from a vessel of sufficient size to be discovered and secured, but an oozing from some part of the exposed granulations, which are soft, pale, and flaccid. On making pressure on them, the hemorrhage ceases, but shortly after dressing the stump it reappears, and even becomes dangerous. After the battle of Salamanca, and those of the Pyrenees, I had several instances of it; there were not any at Toulouse. After the battle of Waterloo they were sufficiently numerous.

It is affirmed in France, and a statement to this effect is made in the *Gazette Médicale de Paris*, for the month of May, 1846, that a secondary hemorrhage, arising from inflammation, ulceration and even sloughing of a part, not only on the surface of a stump,' as in the instances I have adverted to, but in an ordinary wound, such as in the calf of the leg, the principle to be pursued is to tie the femoral artery, as was done by Dupuytren in Case 12, and the reason given is that the artery is suffering already from inflammation, which has rendered its coats more (*secables*) easily divisable by the ligature, and less capable of taking on those actions which were for the firm adhesion of its sides. Of this there can be no doubt, whence the precautions given above, to place the ligature on the artery an inch or two higher up than the part to which the inflammation or other disease has extended. The inflammation which the vessel had already suffered from would have passed that stage likely to end in the cohesion of the sides or the edges of its extremity, and the occlusion of its canal. A ligature cannot be expected to succeed when applied to an unsound artery, although it frequently will do so, for no one can estimate, a priori, the extent and nature of the disease, which may be existing in it. When surgeons write of their having felt and heard an artery crack and crunch and give way under a ligature, applied with a moderate degree of force, they must have met with vessels far advanced in disease. When I first acted upon these principles, during the war in the Peninsula, and published them some thirty years ago, I was not aware of the extent of my own merits, and most assuredly did not expect to see my opinions claimed and recorded as those of modern surgeons in France, and opposed to what the editor of the Medical Gazette of Paris considers to be those of the best English surgeons, which, as far as I know, do not generally suffer from what I have said regarding the state of the artery on the face of a diseased stump or other part which had been the seat of injury. That there is a strong inclination among a few to follow the practice recommended by the editor of the Gazette Médicale. and to tie the artery at a distance, I admit; but this I have forbidden, except as a last resource, and have, I conceive, supported with sufficient proof

Mr. Abernethy supposed that a vessel of the size of the anterior circumflex artery, which is usually smaller than the posterior, and from which it often arises, or other vessels of even less dimensions coming off from a large trunk, would bleed with much greater vigour than others of similar dimensions, which were given off by secondary branches. He was led, I understand, to form this opinion from seeing the pertinacity with which small arteries coming off directly or nearly directly from the axillary artery, and going to small glands in the arm-pit, bled when these glands were removed by operation, in consequence of their connection with the female breast. I apprehend that arteries going to diseased or even inflamed parts do not retain and maintain their contractile powers in a similar manner to those which are going to sound parts. A change has manifestly taken place in them; they are usually larger than in their normal state, and when cut or divided pour out a larger stream of blood, and are more disposed to continue to bleed, unless nature is aided by art. Surgeons are well aware of the difficulties which are often experienced in suppressing the flow of blood from small arteries in the most distant parts of the body, such as the foot and hand, and more especially in vessels which, having once ceased to bleed, have been unable to prevent its renewal. An artery on the side of an inflamed finger will propel its jet of blood quite as far, if not farther than one of the same size in the arm-pit, and I place no reliance whatever on the supposition which, I understand, emanated from Mr. Abernethy, more particularly as it has led to another which has proved a greater mistake, and a great evil, viz, that in the event of one of these small vessels being divided half an inch or even more from the main trunk, that this main trunk must be tied, and not the branch—a practice which cannot be too forcibly condemned. Many scores of times, I had almost said hundreds, have I tied or seen tied by my direction small arteries under these precise circumstances, and with the greatest success.

In my work on the Operations of Amputation at the Hip-joint, &c., I have cautioned surgeons against an evil of this kind (p. 280, 3rd edition).—"Sometimes, after the principal artery of a limb has been secured, hemorrhage will continue from its sides above the ligature, arising in general from some branches which have been cut shorter, or have retracted more unequally than the principal trunk. Instead of puzzling at this for ten minutes, screwing and unscrewing the tourniquet, and at last diving with a needle, and laying the foundation for a secondary hemorrhage by pricking the artery, let it be transfixed, and pulled out by the tenaculum, and separated a little with the scalpel from its connections, as high as those troublesome openings, when a ligature is to be put upon it, and the end of the artery cut off with the scissors; and I never saw this ligature pushed off a large artery when properly tied. This inconvenience is in general avoided by the division of the muscles, the operator taking care to divide the principal artery at one stroke of the knife, and with it half an inch at least of surrounding substance on each side, when these small vessels will give no trouble. This is another precaution which may appear trifling, but is often of great value.

"When there is bleeding from any particular part, both venous and arterial, in larger quantity than can with propriety be overlooked, the part ought to be pressed upon by the points of the fingers, one on each side, or rather separated. The blood should then be absorbed by a small piece of sponge, when the vessel will be found retracted within the muscular fibres surrounding it, which prevent the flowing of the blood per saltum. If this fail, a slight touch with the scalpel will show the vessel, and save much unnecessary delay. I have seen the arteries of a stump occupy a person a quarter of an hour, and were not even then properly secured."

CASE 87.—Mr. Stanley operated upon a femoral hernia in a man sixty-three years of age. At the time of the operation there was no unusual bleeding. About an hour after it the bandage which had been placed over the wound was observed to be soaked with blood. On removing the bandage large clots of blood were found not only filling the cavity of the wound, but also extending upwards upon the walls of the abdomen. The wound was filled by compresses of lint, and a bandage firmly bound over them. There was no return of the bleeding. On the second day after the operation the man died from peritonitis. On examining the body the obturator artery was found to arise by a common trunk with the epigastric, but it passed on the outer side of the mouth of the sac, and was therefore out of the way of injury. An artery the size of a thick sewing thread arose from the epigastric, and passed across the front of the mouth of the sac. This was divided, and it was the only artery discovered, in a careful examination of the parts, which could have furnished the profuse flow of blood that took place shortly after the operation for the hernia.

Remarks.—This case was supposed not only to support, but to demonstrate at the time the truth of Mr. Abernethy's views on this point, and some of the young gentlemen about the hospital announced that Mr. Stanley was about to tie the external iliac above and below the origin of the epigastric and circumflexa ilii arteries, in accordance with such opinion. Mr. Stanley was however content to apply a compress and bandage, as in ordinary cases.

CASE 88.—I performed the operation many years ago at the York Hospital, Chelsea, of removing the left testis, and tied the spermatic, the cremasteric and the deferential arteries, the three which usually bleed, and left my patient. Three hours afterwards the assistant-surgeon on duty sent a messenger to inform me that there had been some bleeding, that he had opened the wound, and that the man's bowels were coming out. Perfectly satisfied that I had made no mistake, I nevertheless went to Chelsea in some trepidation, and when the dressings were raised there certainly did appear to be a large double fold of intestine protruding to the extent of four or five inches. On further examination this proved to be coagulated blood, which, under the pressure of the external parts brought together by ligature, had simulated the appearance of intestine. On its removal the little vessel from which it came bled vigorously. It was in the integuments near the external ring, and apparently a branch of the external pudic artery coming from the thigh. A single thread of ligature settled the matter, and the man was soon discharged cured.

It is inexcusable enough to be afraid of large vessels; it is perfectly ridiculous to be afraid of small ones. In almost all cases of amputation at the shoulder-joint, the posterior circumflex artery is cut off at rarely more than an inch from its origin, frequently less. The anterior circumflex is often even shorter; yet these vessels once fairly tied never give any trouble. When secondary hemorrhage has taken place it is not recorded that the bleeding came from either of them. It has always been from the main trunk. They have remained closed, which they should not have done, if this hypothesis were in any way well founded. The operation of amputation at the shoulder-joint

would be a fatal operation if not performed above the origin of these vessels, which it rarely is, and yet no great operation can be more successful. I have not within my recollection known a ligature fail on a branch half an inch distant from the main trunk of a great artery, and most certainly such an evil could not have occurred frequently without my having remarked it, as well as the inconvenience arising from their being cut somewhat shorter, on which account I have directed their removal altogether, with that portion of the main trunk whence they sprung. I am therefore, I consider, entitled to express my disbelief not only in the hypothesis, but in what is of more consequence, in the practice intended to be deduced from it. It would be a great error, in my opinion, implicating the limb, and perhaps the life of the individual, to tie the axillary artery for a wound of the posterior circumflex half an inch from its origin. It would be equally dangerous to tie the external iliac for a wound of the epigastric or of the circumflexa ilii arteries. · It would be infinitely worse to do it for a wound of a more superficial vessel in the thigh, unless as a last resource, however close it may arise from the femoral artery. It is much to be regretted that it should be necessary to argue such points as these in 1846, which were apparently overturned and even derided in 1816. The editor of the Gazette Médicale de Paris may indeed fairly sneer at English surgery when compared with that of France if such are to be its precepts.

The axillary artery from its passage over the first rib as subclavian until it leaves the edge of the pectoral muscle to become humeral, is anatomically divided into three parts:—The first between the lower margin of the clavicle and the upper edge of the pectoralis minor muscle, which space is somewhat more than an inch in length under ordinary circumstances. The second part lies under the pectoralis minor muscle, is about the same length, and is covered or concealed by it. The third part extends from the lower edge of the smaller pectoral muscle to the lower edge of the greater, and is longer than the other two together. A vertical or perpendicular incision three inches long through the lower half or inferior border of the anterior fold of the arm-pit, in the direction of the axillary artery, would include the common integuments and the great pectoral muscle, and might be enlarged upwards if necessary, the finger being used as a director. It would completely expose the whole hollow or pit of the arm, with the smaller pectoral muscle lying across its upper part. The finger introduced under this upper part would enable the operator to divide it also if necessary, or to draw it upwards, when the artery, vein, or veins, and the plexus of nerves, might be traced up to the first rib without difficulty. The artery if open would bleed when pressure was taken off the subclavian above. With every part thus fully exposed it would be as easily, nay, more easily, separated from its surrounding or accompanying nerves and veins, and a ligature placed around it, than in any other way. The lower end of the cut or divided vessel might then be sought for, and secured in a similar manner.

Compare with this very simple operation the account given of that which is usually performed, taken from the best book on the subject:—

"The patient may be seated, with the shoulder of the affected side inclined backwards: an assistant should be placed behind the patient, with instructions to compress the subclavian artery in the event of hemorrhage; a semilunar incision is to be made about three inches long through the integuments, commencing about one inch from the sternal end of the clavicle, and extending towards the acromion process as far as the anterior edge of the deltoid muscle, avoiding the cephalic vein and thoracica-acromialis artery; the clavicular portion of the pectoral muscle is thus exposed, and is to be divided in the same direction, and to the same extent, as the external wound; the flap thus formed is then to be everted, and some loose cellular membrane being detached, the superior edge of the smaller pectoral muscle will be exposed; in this stage of the operation, several branches of the thoracic arteries are in danger of being wounded. A director should then be insinuated beneath the strong fascia extending from the subclavian muscle to the coracoid process, and a portion of the fascia divided. Some loose cellular membrane and a few small blood vessels being detached with the blunt extremity of a director, the axillary vein will be exposed; this vessel should be pressed inwards towards the ribs, and the artery will be felt or seen pulsating; it must be carefully detached from the nerves for a short distance, and the aneurism needle passed under it, the needle being directed from the thoracic to the acromial side. In applying the ligature, it is to be recollected that one of the large nerves of the plexus inclines to the front of the artery, and having a pulsation communicated to it, might be mistaken for the artery itself. Even on the dead body, this operation is by no means easily performed; but on the living subject it must be attended with considerable difficulty, particularly in corpulent persons: the depth at which, in such individuals, the artery lies, together with its complicated relations, must render the application of a ligature to it peculiarly hazardous. It appears to me that few cases can occur in which the operation now described ought to be preferred to that of tying the subclavian artery external to the scaleni muscles; at the same time it must be admitted, that an extensive wound passing through the pectoral muscle, may expose the axillary artery, so as to render the application of a ligature to it in this situation comparatively easy." This description is critically and anatomically correct; no man in the united empire could do the operation better than the author of the work from which I have extracted it; and yet the operation is so thoroughly dangerous and useless, and so contrary to true principles, that it ought never to be performed. It ought to be struck out of the catalogue of operations. I know it to be dangerous, because I am aware of two persons having died under it, before the ligature was applied, the axillary vein in both instances having been injured. In aneurism from disease of the axillary artery, the operation should always be done above the clavicle; in a case of wounded artery, at the spot in which the artery is wounded below it.

Case 89, by Mr. Quain, from the Lancet of May 2, 1846.—J. S., aged twenty-four, fell upon an iron rail which was forced into the axilla, and was admitted into University College Hospital under Mr Quain on the 4th of March. He was faint from the loss of blood, estimated by himself at two quarts, although the bleeding had ceased. The wound, about an inch in length, was in the centre of the arm-pit, and pulsation was distinctly felt in the radial artery. On the 6th, no pulsation could be felt below the wound in any of the arteries; nor, until the 11th, when it was slightly observable in the radial artery. After this the patient gradually recovered, and was discharged, cured, on the 27th of March.

Mr. Quain stated, in a clinical lecture, that the quantity of blood lost was doubless exaggerated, and that if arterial hemorrhage had recurred he should have divided the pectoral muscle in the track of the wound, and secured the bleeding vessel above and below the opening in it.

Remarks.—This case essentially resembles cases No. 2 and 82. The presence of pulsation during the first two days in the radial artery, shows that the canal of the artery was not obliterated in the first instance, and that it only then became obstructed, from inflammation taking place in the brachial artery, or extending to it from a small vessel divided near its origin from it. The restoration of the pulsation in the radial artery on the seventh day after the accident shows the establishment of the collateral circulation.

The non-interference of Mr. Quain, beyond the application of a small compress and bandage, and of keeping the arm quietly supported in a sling by the patient's side, is consistent with that principle of surgery I have endeavoured to inculcate, which forbids that a man should be cut on the speculation of what may happen if he is not. If the bleeding had recurred, there would then have been a reason for interference, and Mr. Quain says he would have placed a ligature on the artery above and below where it was wounded, after having divided the pectoral muscle—an operation which would have been worthy of his high attainments in anatomy and surgery, and an example which it is to be hoped all surgeons will hereafter follow as a precept in surgery.

Let us however suppose that the external wound was not direct, and that some two or three ounces of blood had been retained in the cellular membrane under the integuments; would this have rendered an operation on the subclavian artery, above the clavicle, a preferable operation? I do not believe there is now a surgeon in England will answer in the affirmative. Let us go one step further, and suppose that the external wound had closed—a circumstance I have shown to have happened in many cases, and that a small pulsating tumour, containing three, four, or six ounces of blood, had become perceptible under the cicatrix on the day he was discharged, that is, thirteen days after the receipt of the injury—what difference would there have been in the case from the first day? The answer must be, simply in the closing of the external wound, for no one will suppose that the artery could be diseased. I shall now ask whether any one will say that the trifling circumstance of this external wound having healed, ought by any possibility to render a different operation necessary? That instead of the same simple division of the parts to expose the hole in the artery, and to tie it—an operation of no difficulty and of little danger—the deadly operation of tying the subclavian artery above the clavicle, should be resorted to. That, because the hole in the skin had healed, the patient's life was to be placed in jeopardy by an operation which has hitherto destroyed every other person on whom it has been performed. I cannot answer for what all sorts of surgeons may do, or consent to have done upon themselves, but I venture to assert that there is not a gambler existing who can calculate chances that would suffer such operation to be done on himself when those chances were fairly explained to him.

When Mr. Medhurst was tried for the murder of his friend, in a fit of passion, by stabbing him in the belly, the solicitor for the defence offered me any sum I pleased to ask to go into court, and prove that the defunct had been badly treated by his surgeons. I refused, and have invariably refused all such applications on the ground that the surgeons had done their best, and that it was not for me who had had greater opportunities of acquiring knowledge in these particular injuries, to find fault with them, who had been originally taught no better, and had not had opportunities of acquiring further information. In the treatment of wounded arteries you are now all taught better, provided you are pleased to learn, and if hereafter any of you will commit such errors as I have protested against, and so urgently denounced, I shall not refuse to give my aid in having you legally admonished.

A Course of Lectures on Hernia,

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(Delivered in the Theatre of the College, and revised by the Professor for the Medical Times.)

Lecture IV.

General observations on the operation for strangulated rupture. Object of the operation: Preliminary proceedings. Division into five stages. 1. Division of the coverings—mode of incision, division of the fasciæ. 2. Division of the sac—appearance of the sac, distinctive characters, mode of opening, fluid contained in it; Mr. Pott's case; mode of division. 3. Examination of contents of sac—mode of examination, care necessary, appearance of intestine, appearance of omentum, unfolding omentum; Mr. Hewitt's observations. 4. Division of the stricture—precautions; proposal of Thevenin; mode of dividing the stricture. 5. Returning the protruded bowel—drawing into view the strictured portion, condition of the gut, adhesion, colour, indentation of the stricture, adhesion of omentum. Conditions under which the bowel should be returned, doubtful state of the gut, treatment advised; treatment of omentum when in large quantity and not easily reducible; Gut to be first returned; Obstacles retarding or preventing the

return of the bowel, and their treatment; Treatment of mortified intestine; mode of removing omentum; Mr. Key's advice.

GENERAL OBSERVATIONS ON THE OPERATION FOR STRANGULATED RUPTURE.

The circumstances connected with the operation are, for the most part, common to all strangulated ruptures, the ultimate object being the relief of the bowel from strangulation, which resists other means, the restoration of its functional condition, and commonly its replacement in its natural cavity, the belly, though this last is not always possible or necessary.

The parts, if hairy, having been shaved, and the patient placed on a table or bed of convenient height, with the limbs and trunk so disposed that the abdominal muscles may be relaxed, and thereby prevented, as far as possible, from opposing the return of the contents of the rupture sac, the operation is to be commenced. The operation consists of five stages: the division of the coverings; the division of the rupture sac; the examination of the contents of the sac; the division of the stricture; and the return of the protruded bowel.

1. *The Division of the Coverings.*—The coverings of a rupture vary according to the kind of rupture—according to its size and duration. Skin and cellular tissue, more or less loaded with fat, always cover the peritoneal sac, besides which, in the more important, though more common, ruptures, there are generally other and distinctly distinguishable coverings of different kinds depending on their situations. I prefer, whatever be the character of the cut through the skin, lengthways, across, or inverted T shaped, so as to turn back the flaps, to make it, by cutting down through the skin, rather than by lifting up a fold of skin between the finger and thumb, at right angles with the direction it is proposed it should have, and then thrusting the knife through and cutting upwards. The latter has a smarter appearance than the former, but is less safe, as, if the coverings beneath are thin, the rupture-sac may be at once opened, and the bowel wounded. This, I recollect, in one instance being done, the sac immediately exposed thereby, and both it and the bowel by the slightest accident only escaping injury. To avoid this danger, the cut should be made carefully down through the skin only, and then it is of little consequence what there is beneath. Commonly, the cellular tissue and other coverings, if any, are separated into layers by a loose and scanty kind of tissue; and those layers should be separately opened to an extent sufficient to admit the director, which should be gently thrust in the direction in which it is proposed to divide, and then this layer either cut down upon, or slit open by running the knife along the groove of the director. Should any vessel be cut into and disposed to bleed, it should be at once tied, as thereby inconvenience is avoided, and often the character of the layer below prevented from alteration by the soaking and sponging up of the blood. Commonly, the covering layers are distinct and distinguishable as readily as in ordinary dissection; but sometimes they are so confused together, that, when thin, they can scarcely be made out and dissected separately; whilst, at other times, they are twice as thick as usual, and may be split into many more layers than actually exist, and this especially applies to the cremasteric covering in scrotal rupture. After the division of these layers, the sac is exposed, to decide on the arrival at which is a very important step in the operation.

2. *The Division of the Sac.*—When the sac is exposed, it generally presents an indistinctly transparent bluish appearance, through which its contents are more or less perfectly seen. Sometimes it is so thin as to excite suspicion that it has been already opened, and that the bowels are actually exposed; and hence arises the danger of returning an unopened sac, still enclosing its contents, into the belly. Two circumstances, however, usually show that the part exposed is only sac; first, that there has not been any escape of serous fluid, and secondly, that the bowel cannot be at all separated, but moves about in one lump. At other times, the sac is so thick as to be quite opaque, and entirely conceal the bowel within. It is generally advised, when the sac is presumed to be reached, to nip it up with forceps, and carefully open it with the point of a knife; but this cannot always be done, especially if the sac be very full. It is, therefore, preferable to scratch gently through it with the point of a probe, and immediately the cavity is opened, almost invariably serous fluid oozes out, which is a very satisfactory circumstance, showing the sac is opened. The quantity of fluid contained in the sac is sometimes very considerable; Mr. Pott mentions a remarkable instance of this kind, in which he let out about half a pint of clear, limpid water; upon the discharge of which the whole tumour of the scrotum subsided, and my assistants," says he, "were convinced that I had mistaken a hydrocele for a hernia. But although the whole swelling of the scrotum had entirely dissipated by the discharge, yet the tumour and hardness about the abdominal opening was unaltered, and the patient's pain the same. With a probe-pointed knife I laid open the whole sac, whence the water had proceeded, quite down to the bottom, and found the naked testicle within it. This gave the disease still more the appearance of hydrocele, and I began to think that it was so; but, upon passing my finger up to examine the state of the abdominal tendon, I found a small portion of intestine engaged in it, and bound extremely tight."

Through this aperture a director is to be gently introduced, and the sac slit up sufficiently to admit the entrance of the finger, upon which the remainder of the division is best and most safely made, its breadth preventing the bowel slipping on the edge of the knife and being wounded.

3. *Examination of the Contents of the Sac.*—The cavity of the sac having been sufficiently laid open, its contents must be ascertained and examined; these may be either intestine or omentum, or both; and it is necessary they should be fairly lifted from the sac, as there may be in front so large a quantity of omentum as completely to conceal a small portion of intestine which lies behind.

The quantity of gut varies considerably in length; sometimes it is many inches, and folded not unfrequently in coils; at other times there is only a short loop, and occasionally not even the whole of the intestinal tube, but merely one side of it, forming a knuckle of intestine as it is called, is protruded, so that there is still a passage by which the contents can pass from that part of the gut above the stricture to that below it.

The lifting up of the bowels also shows whether they be connected by adhesion to the inside of the sac to what extent, and whether the adhesions be recent or old; or whether they be confined to the sac by fibrous bands; or be entangled in one another; or whether they have burst through any part of the sac, and that which has been exposed on opening the sac, whilst a large portion have escaped into another chamber.

In the course of this examination, the condition of the protruded parts will be ascertained, or it may have been observed at first, whether the gut retain its natural character, its peritoneal coat smooth and shiny, or whether it be more or less overspread with flakes of adhesive matter; whether its colour be natural or more or less dark from congestion, consequent on the tightness of its strangulation; or from bruising, the result of violence in the attempts at reduction; whether the peritoneal covering be dull and separating in shreds, and the colour of the gut slate, or green, or black, or a mixture of all three, which are characters showing it to be in a gangrenous state, and, therefore, requiring especial care in handling, lest it should burst. The state of the omentum would be also ascertained, whether it adhere to the sac, and to what extent; whether its appearance were natural, and if it could be spread out, a sign of its recent descent; or whether it were matted together into a hard lump, showing it had been long down and subjected to pressure; whether its colour were natural or pale, yellowish or greenish, showing it to be gangrenous.

In some rare instances when there appears to be omentum only in the sac upon separating or unfolding, it is found to wrap round a portion of gut so completely as to form for it an additional sac. The best account of this condition is given by Mr. Hewett, in the twenty-seventh volume of the "Medico-Chirurgical Transactions," who mentions that, of thirty-four cases at St. George's Hospital operated on, four were of this kind, two of which were femoral or inguinal, and the others umbilical. There is an example of this kind in the museum of St. Thomas's, and another in the collection of this college.

Having thus done, the aperture by which the bowel has escaped from the belly is to be sought after, or perhaps, more correctly, the seat of stricture found, and the finger passed to or into it, to make out its tightness and character, and whether it be in the mouth of the sac, or in the sac itself, and by what formed.

4. *The division of the stricture* must now be effected, by first introducing, if possible, the point of the finger, or even merely the end of the finger-nail, into the area of the constricting part. This may be done almost always sufficiently to carry the stricture-dividing knife in upon it; but if the opening be too straight, then a director must be very gently pushed through it into the belly, and the knife carried upon it; but the finger is always the best instrument, and should be preferred to all others, wherever it can possibly be employed. If a director be used, it is best to interpose a spatula between it and the bowel, to prevent the latter being wounded. It was formerly proposed by Thevenin to widen the strictured aperture by introducing a dilator, or by introducing two blunt hooks, one on either side, and pulling the aperture asunder. This operation is now set aside, and the division of the stricture always performed.

The knife must be passed into the mouth of the sac, or through that part of it where the stricture is situated, flat upon the finger; and when its blunt end is presumed to have entered beyond the stricture, it must be then turned edge upwards and the stricture divided by gently sawing it backwards and forwards, or, what is better, by depressing and elevating its handle with a pumping-like motion. As the stricture is divided, a sort of grating or tearing feel is conveyed to the finger, which, moves in more and more as the division is continued, till it passes into the cavity of the belly, and when this can be effected, there is generally room for the return of the bowel. The knife is then again held flat, and withdrawn.

5. *The return of the protruded bowel* concludes the operation. Previously to attempting the return of the contents of the sac, it is always advantageous to draw into view that part which has suffered strangulation, in order to examine its condition. Under favourable circumstances, if it be gut, its tube will be found distended with air or fæces to its natural size, although generally the mark of its previous girting is more or less distinct. But if the strangulation have been long existent and severe, a distinct indent is seen, corresponding to the stricture, so that the tube of the gut presents a sort of hourglass-like contraction, which does not immediately disappear. If inflammation have been set up, adhesive matter will be found at this part, though not perhaps elsewhere, which may have actually glued the gut and mouth of the sac or stricturing passage together, and this union may be so complete, that except great caution be used in drawing the gut, it will tear at the strictured place; indeed, the adhesion may be so firm, that it may be not only dangerous, but impossible, to separate it; or the gut may have become gangrenous, and then tears with the least pulling. It occasionally happens that whilst the examination of the gut is being at this time made, its colour, which on opening the sac was deep venous red, becomes changed to florid red, and then becomes paler; this is a very favourable sign, as showing that the dark colour merely depended on venous gorging, and not on bruising of the gut, as is too frequently the case. The indent of the stricture remains, as might be expected from its structure, more decided on the omentum than on the gut; but soon disappears when the omentum is opened, except it have become matted and massed together by the duration of its protrusion. The omentum is often found adherent to the mouth of the sac, and the adhesions of old standing, and not tearable.

The general condition of the protruded parts has been already inquired into on laying open the sac; but this must now be carefully repeated, with the view of determining as to their reduction. If the peritoneal coat of the gut be smooth, bright, and

shiny, although it be dark coloured, it m be safely returned, and the case expected to do well. If, as sometimes happens, the gut and the sac be united by recently poured out adhesive matter, but can be separated by gently running the finger between them, the gut may be safely returned; but if the connexion be general, firm, and unyielding, the gut must be left in the sac, as there is danger of tearing the gut rather than the adhesions in attempting its separation from the sac. If, however, the adhesions be only at a few points, and they be lengthy, they may be cut through, and the gut set at liberty may be returned.

Sometimes the gut is of a pale hue, and feels thickened, as if serum were effused into the cellular tissue between its coats; this, from one or two instances I have noticed, I am disposed to believe a doubtful state of the gut; it does not indeed appear gangrenous, but its vitality may be so checked that it will not resume its functions, nor recover itself, and after its replacement in the belly will lie on or near the spot on which it has been pushed; and after death will be found with its appearance unchanged. It must, therefore, be questionable whether when in such a state the gut should be returned, and I am rather disposed to think that should a similar case occur to me, I should leave it in the sac, and make a cut into it, as in a distinctly mortified intestine. When the shreddy appearance of the peritoneal coat, and its slaty, green, black, or mottled colour, and emphysematous feel, clearly show the gut to be gangrenous, then its return must not be attempted, but it is to be left in the sac. With regard to the connexions of the omentum, if it be healthy, they may either be separated, cut through, or left, according to the circumstances mentioned in reference to the gut. If the omentum be in large quantity, and not easily returnable, it should be removed, as if left it often soon dies, excites irritation in the sac, and, rotting away, is discharged with the suppuration. Thrusting it up into the mouth of the sac, and leaving it there, with the hope that it may plug up that aperture, and prevent protrusion in future, is now generally held to be problematical, if not incorrect. When the omentum has become matted and hardened, it is better to remove it at once, and the same should be done if it be dead or gangrenous; and though little changed in appearance, it may be dying or dead, in which case the blood will not pass through its veins, or is actually coagulated, as may be observed by their remaining empty when the blood has been pressed out with the handle of a knife.

The return of the bowels having been decided upon, it is best that the gut should be first returned, previously to which its contents should always be emptied into the intestine within the belly by gentle pressure, till it has become quite relaxed, and its bulk diminished, then it should be gradually pushed up with the points of the fore fingers placed just below the sac's mouth, there retained, and by alternate pushing and fixing, successive small portions returned into the belly. Usually when a little piece has been returned the rest soon follows, and the mouth of the sac is cleared. The finger should then be passed through into the belly, and moved about to ascertain that all is replaced.

Sometimes obstacles occur which retard or prevent the return of the bowel. If the stricture have been very freely divided, it not unfrequently happens that as fast as the bowel is pushed up fresh bowel descends; when this occurs, it is advisable to raise the nates considerably, so that the mouth of the sac should be higher than the general cavity of the belly, and then usually the protrusion ceases. On the other hand, the protruded bowel or even the sac itself may prevent reduction. Under common circumstances the bowel is more at fault than the omentum, which usually offers little obstacle; but the gut is often so full of air or fæces, or, after having been emptied, so immediately re-fills, that it is returned with great trouble. Instances have been mentioned in which, from these causes, the gut could not be returned, and punctures, or even cuts, have been made to discharge the air or fæces. I have never seen an instance in which this was necessary, and I much doubt whether the practice be necessary or prudent. Admitting it to be as it is, a tiresome and annoying job, a little additional patience is generally sufficient to effect the return. But if all attempts to do so fail, I think if it be ascertained that the division of the stricture have perfectly relieved the strangulation, it is better to leave the gut protruded than to increase the patient's danger by inflicting so serious an injury as a wound in the gut, by which his recovery is rendered very doubtful, and more especially, as, if the protruded bowel can be so raised above the cavity of the belly, that the bowels within shall drag instead of being dragged on by the bowel without, the weight, together with the peristaltic action, will, in the course of a few days, retract the bowel and do all that is desired. The sac itself may interfere with the return of the protruded parts, in consequence of its becoming partially detached at its upper part in attempting to reduce the rupture, and thus a sort of circular *cul de-sac* be formed around the stricture. An instance of this kind happened to me a few months ago: the operation proceeded satisfactorily through its several steps, and the stricture was so divided as to allow my finger to pass readily into the belly, but I was repeatedly foiled in the reduction of the gut, till I lengthened upwards the cut through the coverings, for the purpose of making out the difficulty in returning the gut, as my finger still readily entered the belly when it was drawn down, and then I distinctly perceived that the difficulty arose from the gut as it was pushed up, slipping into such a circular hollow around and above the stricture as I have described and thus bringing the edges of the stricture together and closing the aperture. The edges of the sac were then gently drawn down, which destroyed this *cul-de-sac*, and the gut was easily reduced.

When the gut is mortified, it should be freely cut into, so that its contents may escape readily, which will forthwith relieve the patient by affording escape to the fæces and air which had collected above the strictured part of the bowel, and probably only for a few hours anticipate its bursting. There is no increase of danger by cutting into the gut, and, indeed, from Petit's account of a case which he himself treated, and others, too, which were operated on by an empiric, one of which he witnessed, it seems he considers making an opening into the gut sufficient, without dividing the stricture. There is no necessity for stitching the gut and sac together, as by some surgeons recommended, to prevent the former being drawn back into the belly, as union between it and the mouth of the sac has, in general, already taken place, and there is little chance that it will move out of the sac. The whole wound of the sac must be left inclosed, so as to favour the ready discharge of fæces, and covered with a light bread poultice. The slough gradually clears away, and an artificial anus is established, which endures for a time, but, by degrees, generally closes without further treatment, and the passage from the upper to the lower part of the bowel being restored, the fæces take their natural course through the rectum.

When it is necessary to remove the protruded part of the omentum, I think it preferable to tear it gently across, and only cut such parts as will not tear, rather than to cut through it at once. The advantage gained by this proceeding is, that the vessels thus torn, especially if the omentum be healthy, and its large bulk only is the cause for its removal, are less disposed to bleed, and consequently do not need tying, at least a less number of them require that treatment. Mr Key advises that, "the omentum should be unfolded before it is divided by the knife, otherwise the cutting off of the omentum in a mass prevents all the vessels being seen, and when returned into the abdomen they bleed profusely." And he mentions a case in which, after a large portion of omentum had been cut off, and all the bleeding vessels tied, arterial oozing began four hours after, and continued to an alarming extent; when the sac was opened, the clot cleared away, and the bleeding ceased. I have never seen this happen when the omentum has been torn off as I have described.

After the return of the bowel, either when there has been little or much fluid in the sac, it occasionally happens that there is a very free escape of fluid from the cavity of the belly. I have, in one or two instances, seen this in such a quantity, and of so red a colour, as to cause alarm for the moment. It is, however, nothing more than the serum of the sac, which had probably been squeezed up into the belly during attempts at reduction. It must, however, be carefully examined, for if there really be any bleeding vessel, it must be sought for and tied.

Clinical Lectures on Typhus Fever,

By Dr. Corrigan.

Delivered at the Whitworth and Hardwicke Fever Hospitals, Dublin.

Lecture III.

(Concluded from p. 152.)

Lesion of Innervation—Want of Sleep in Fever, Danger of it—Errors of Private Practice—Management of Light, Attendance, &c.—Leeching—Cold, Rules for it—Opium, Reasons for not using it—Hyoscyamus—Cerebral Breathing, Crisis by Urine, by Sleep, &c.—Crisis by Perspiration, Danger of it—Conclusion.

We proceed to-day, Gentlemen, with the consideration of fever, still pursuing the same plan of analysing the disease, in reference to its functional lesions. On the first day, you remember, we discussed the lesion of the circulating function; the last was occupied with the consideration of the lesion of the nutritive function, including assimilation, secretion, and excretion. If we look upon the living being stretched upon a fever bed as constituted of a number of important functions, we now arrive at the consideration of one of these, which holds a very important place—that of the cerebro-spinal system, or the function which presides over sensation and volition, and connects the living being with the objects which surround him; the lesion of this function, if it continue unarrested, must invariably involve the life of the individual.

The lesion of this function is manifested by want of the natural rest, in other words, by the absence of sleep, or the presence of that state of watchfulness which you observe in fever patients, and which I must guard you against looking upon as a mere symptom of fever; for, in the analysis I have made of the disease, this, as well as the other lesions, becomes essentially *not* a symptom, but *a part* of the disease. Suppose, while we still follow up the original plan which I have adopted throughout these lectures, you were to ask, what added to the case of fever as we had it on the last day consisting of the two-fold lesion of the circulating function and the function of nutrition—what, I say, added to a case of that kind, would constitute an aggravation of the disease? The answer would at once, I think, be a lesion of the cerebro-spinal function. If sleep be not obtained, the patient must die, and may die from that cause alone. You see a patient die of this one lesion, occurring simply as an idiopathic affection; you see it, for instance, in delirium tremens, in which a man may die solely from want of his natural rest; and you find no organic disease to account for death. This lesion, therefore, becomes an exceedingly important aggravation of the disease before us, and, as I just now told you, not a symptom, but a part of the disease. If it continue for a few successive nights, delirium, and subsequent coma, are the invariable consequences; and if these supervene, they constitute a very serious aggravation indeed of the disease, and the occurrence you will find marked by the following circumstances:—When you put a question, it will be answered imperfectly; the patient may show an inclination to answer, and may put out his tongue when pressed to do it; but, if this lesion continue unchecked, he soon becomes insensible, and falls into a profoundly comatous state. Remember, then, that this lesion, which is the great object of our lecture to-day, requires as much attention as any of those already discussed, and above all remember to look on it not as a symptom but as a part of the disease. Viewing it in this way, you will be able to understand the importance of the question—has the patient slept? Just as on the last day you saw the importance of asking if the patient was thirsty, you saw how that question—apparently unimportant—furnished you with a knowledge of the condition of the nutritive function. If you hear that the patient has continued sleepless for several nights, it is quite clear that, under such circumstances, life cannot be prolonged. Then comes the question,

what are you to do in order to relieve this function? In answering this question I must again a third time impress on you the fact that you are not to look upon this want of sleep as a symptom, but as a part of the disease; and with this fact in view, we find the treatment to resolve itself into two heads. First, general management, including the adaptation of external agencies; secondly, the employment of remedies. As regards the first of these heads more particularly, I may observe, that nothing can be more marked than the difference (in its relation to the lesion of the function we are now considering) between a patient in an hospital and one in private practice. In the latter case, want of sleep usually sets in early, and is much oftener followed by delirium and coma than in the lower classes. There are errors in the management of the private patient which greatly increase the tendency to watchfulness in him, and in consequence of which, many, I have not a doubt, have fallen victims. What is the plan usually adopted with regard to attendants in such cases? It is most often this. two nurses are generally employed, and from that moment a continued noise or whispering is perpetually kept a-going, and, of all the torments to which it is possible to subject a fever patient, I know of none that bears a comparison with a continued succession of whisperings. It is well known that a patient under such circumstances strains all his faculties to catch—no matter at what amount of torture to himself—the slightest whisper that may be made. To try and obviate in some measure this source of annoyance, I have latterly been in the habit of ordering the patients' ears to be stuffed with cotton.

One very remarkable case that occurred to me was strongly illustrative of the above statement. A gentleman who came up from the country caught fever, and forthwith was followed up to town by his mother and sister, either of whom constantly took her post at the foot of his bed, or the bedside, and either kept continually calling on the wretched patient to speak to her, or forced him to swallow drinks every other minute, so as most effectually to deprive him of all chance of sleep, and to contribute in no small degree to his death. Another very marked contrast between the hospital and the private patient consists in the management of light in the room of the latter. Here, in hospital, we are in the habit of admitting light and air, and the mortality is far less than in private life, where they make it rule to exclude every ray of light except from the flickering light of a candle. This, together with the perpetual motion of the nurse or some member of the family about the room, most effectually deprives the unfortunate patient of the most distant chance of sleep. You can readily understand how, with no difference made between day and night, with none of these alternatives which make sleep a habit, your patient will fall into that half dreamy state which is of all conditions the most unfavourable to the accession of a natural night's rest. Remember, then, to let your patient enjoy the alternations of day and night; do not darken his room in the day; if a direct exposure of the eyes to the light make him uncomfortable, you may permit the use of a light shade, but do not shut out the light altogether. Remember also to have him left as quiet as possible; do not permit him to be disturbed every quarter or half-hour for the purpose of giving him drinks that he does not require. On this point really it often appears as if common sense had left both the professional and other attendants, who in this way force upon the nutritive function a task of absorbing drink, which, in its impaired condition, it is totally incapable of performing. Let your patient be circumstanced as regards light, air, attendance, &c., as much as possible like an hospital patient; let him lie, as is natural to him, like a log in the bed, and let the attendant keep at a distance from him; if the attendant sit even outside the door, so much the better. Remember, as I have so often said, that insomnia is not a symptom, but a part of the disease; and that if sleep be not procured, delirium, and then coma, and most probably death, in the end must ensue.

If we now pass from the consideration of light, air, &c., to the question of medical treatment, the first thing to be done will be to have the head shaved, and this of itself is generally sufficient, for the application of intense cold at this stage is often a serious error; it very frequently obviates the object you have in view, that of procuring sleep. After this, if you ascertain that the patient has still had no sleep, you will not be doing wrong, I am sure, if you apply four or six leeches to the temples. This is a remedy upon which, for my own part, I place more reliance than almost any other. If, after your patient has passed three or four successive nights without sleep, you apply four leeches to the temples, and that you procure for him even half an hour's sleep, you will have done a vast deal towards his recovery. I have seen the most marked beneficial result from this; how the leeching has the effect of procuring sleep it is not easy to explain, and I dislike theorising on a subject connected with practical medicine; but it may be supposed that where the brain has become excited through the absence of sleep for three or four nights in succession, it is first in a state of irritation, and then passes into a state of congestion; at all events, there would appear to be some congestive action of the vessels, which if you relieve by the application of a few leeches, you do, as I have said, much towards the recovery of your patient. A state of general debility, requiring the exhibition of wine, need by no means prevent your employing this remedy, for while you give wine with a view to the tone of the heart, larger vessels, and capillaries, you are perfectly justified in relieving the distended capillaries of the head by the local abstraction of a small quantity of blood, just as in some forms of ophthalmia it is often the best practice to employ local bleeding to relieve the distended capillaries, and tonics to give them the general circulative tone. I was myself first led to adopt this practice in reference to procuring sleep, chiefly from having repeatedly observed that upon the occurrence of epistaxis, sleep supervened, and the patient recovered, although in such cases the general debility had been so great as to have required a free exhibition of wine. You need have no fear of taking this small quantity of blood from the capillaries, for they very soon accommodate themselves to the trifling loss sustained, there is not even the risk that might attend even so small an abstraction of blood taken from a vein, and it really is one of the most valuable means I know of to procure rest. The application of cold to the head is another useful means of fulfilling the same object, but it is one which is too often carried to excess. A bladder containing pounded ice is placed on the head, but air is very quickly disengaged, the ice lies heavily upon the top or back of the head, and sometimes causes even sloughing of the integuments. Instead of ice, take a single fold of linen diped in cold lotion, lay it on the head, and it will generally answer all purposes. You will often observe the nurse take two or three folds of old linen or lint, which she moistens and lays over the head; the consequence of this mode of proceeding is that the cloth, instead of remaining cool by evaporation, is almost always as hot as the parts to which it was applied—in fact, evaporation cannot take place through these numerous folds of linen, and the head is kept absolutely hotter than if no lotion were used at all. All these matters may seem at first trifles upon which I may appear to dwell unnecessarily, but as I have told you, if we recollect that this want of sleep is not a symptom, but a part of fever, too much attention can hardly be paid to minor details. The question might suggest itself to you here, why, as opium is given in delirium tremens, and such like diseases, to procure sleep, why should it not also be administered here, where obtaining sleep is a matter of such paramount importance? Why not give it for the cerebro-spinal function that we are now considering? Because, if opium be given in fever, and, it do not procure sleep, it will do mischief of another kind. It will act injuriously upon the nutritive function, including that of secretion and excretion. In analysing the disease before us, we may derive great assistance from comparing some of its lesions, in function, with symptoms in other diseases. It delirium tremens, for instance, while the tongue and gums secrete their natural quantity of mucus, and the urine is abundant, you may continue to give opium for the purpose of procuring sleep; but suppose that in the course of the treatment the tongue become dry, and brown in the centre, the urine high coloured and scanty, and a slight wound or cut, if there should be one on any part of the body, become dry and everts its edges—in other words, that the nutritive function be passing into a deranged state then the opium is acting as a poison upon the system, and the continuance of its administration would be fatal. The same considerations are to guide you in the exhibition of opium in fever; if the condition of the skin, and of the mucous membrane, and an abundant secretion of urine indicate a sufficiently active state of the nutritive and secreting function, you may venture on a trial of opium; but if the desired effect be not produced at once, do not attempt to press it; if you do, mischief will as surely be the consequence. Hyoscinmus is a remedy which has not an injurious effect upon the functions of nutrition and secretion; but this cannot be said of opium. At the approach of coma, you must not, unless there be strong vascular action about the head, persist in leeching, but have recourse to blistering, as a means of rousing the patient from his state of torpor; and here I may observe that, in the ordinary way of applying a cap blister, as it is called, the blister cannot be made to lie close to the surface; for this reason I have been in the habit of having the blisters cut into strips of an inch in width, laid across the head, in a direction from ear to ear, so that no part is left uncovered, and the strips of blister lie close to the skin. Counter-irritation may also be produced in a few hours by means of croton oil and ung. hydr., mixed.

There is a state of the breathing preceding the approach of coma, which you might confound with that of bronchitis, but in which the danger is very different; it becomes exceedingly rapid, and laboured, amounting to forty or fifty respirations in a minute, but the respiratory murmur is audible in the tubes. There is no mechanical obstruction in them—this is what is called cerebral respiration; while in that of bronchitis or catarrh, the tubes are filled with mucus, and a mechanical obstruction is thus offered to respiration, from which very few cases recover; you observe, besides, the characteristic lividity of the countenance, while in the cerebral breathing the countenance is pale. The cerebral breathing is a breathing of debility, very similar to that which you hear in a person after very violent exercise.

In the case of Prunty, for instance, which you remember was a very severe one, I observed that the breathing was very rapid and laborious, but still the face was pale. The debility was very great, requiring enormous quantities of wine, so much as thirty ounces of which were given in the day; the convalescence in this case will be very slow. There is one point upon which I cannot speak too strongly, I allude to the condition of the bladder; you should look with the strictest attention to the state of this organ. The nurse may tell you the patient passes water freely—in fact, that it flows from him in the bed; but you are aware from what occurs in the surgical wards, in injuries of the head, that this is not to be trusted to; at all events, make it a rule to examine closely, and there can be no harm in the introduction of a catheter. In the female, the bladder will distend to a volume capable of containing at least three quarts, while all the time the urine is dribbling away in the sheets.

In speaking of leeching and other remedies, you observe that I have said nothing of what is to be done on this day or that of fever. Get the idea of days out of your mind—fever is not like a case of peritonitis or pneumonia, in which the stage of congestion and the stage of deposition of lymph, &c., are to be gone through in order. In the analysis we have made of fever, it is purely a disease of function, and these lesions of function are not symptoms but portions of the disease itself; the treatment is to be adapted not to the circumstance of the fifth, sixth, tenth, or twentieth day of fever, but to meet the state of each particular function day by day. Take them up in their proper order as you stand by the bedside: first the circulating function, made up of the heart, larger vessels, and capillaries, and examine the state of this function; next look to that of nutrition and secretion, as declared by the state of the tongue, gums, urine, and the other symptoms, as I have gone through them; then to

the cerebro-spinal system, which we have examined to-day. If you understand clearly the rules I have endeavoured to lay down, you will understand why it is that we may with advantage combine the application of leeches with the administration of wine, and along with the latter the exhibition of mercury—the one to meet the lesion of the circulating function, the other for the purpose of relieving the derangements of nutritive function. You also know that mercury may be combined with aq. am. acet., &c., when febrile excitement is to be subdued, and you can perceive the value of blisters and other stimulants as a means of stimulating the function of circulation, or of rousing a patient from the lethargic condition into which he may fall. Thus, if you follow up the rules which in the analysis of fever I have endeavoured to carry out in the short space of three lectures on the subject, you will be able to understand why it is that remedies of an opposite therapeutic tendency may be usefully combined. You can understand also, that fever is not a disease to be treated by guess-work; but that it has, in fact, on accurate investigation, rules for its treatment as definite as those of any other disease you may have to contend with. I have explained to you why it is that we have a crisis in some fevers and none at all in others; I have shown you that in cases accompanied with very marked derangement of the nutritive function, a crisis by the urine is observed, and is manifested by a deposition of that highly animalised substance, urea, in double or treble the quantity contained in healthy urine.

In other cases, where the lesion we have this day been discussing plays a principal part, crisis by sleep occurs—for instance, you find a person sleep occasionally for six-and-thirty hours who had for several days, perhaps, not closed his eyes; he awakes after a lengthened repose of this kind, drinks freely, and his strength rapidly returns upon the restoration to health of the important function of the cerebro-spinal system.

In other cases, again, no crisis at all is observed, and that most often occurs in fever of the type prevailing at present, where the lesion of the circulating function is the chief derangement. You can distinguish nothing like a marked crisis in these cases. The urine may show some slight evidences of it, but they are very trifling. But the crisis most of all to be dreaded in the fever now prevailing, is a crisis by perspiration; for you may almost lay it down as an axiom, that when perspiration sets in on the sixteenth or seventeenth day there is very great risk of your patient's life. It is very hard to say why it is so, but you must by all means avoid anything that would encourage perspiration. In common inflammatory fever its appearance upon the second or third day may be looked for as an advantageous occurrence, but in our present maculated fever it is much to be dreaded, as a circumstance productive of extreme exhaustion and relaxation.

I could, of course, spend a length of time upon the mere varieties of fever, but enough I think has been said in these three lectures to afford you principles upon which you obtain perhaps a better foundation as regards the treatment of fever than you could derive from some of the books that come before you. At the same time I throw out these views without any desire that you or others should dogmatically follow up the principles I have endeavoured to set forth; but that if, in a comparison with the rules of others, you find mine more plain in their application, it will be sufficient for me to have placed the rules in a clearer point of view.

M. Tuke, late medical director of the C—— Lunatic Asylum, was on Sunday, 17th instant, attacked at night in Paris by an intoxicated soldier, and severely wounded about the head and face. Being deprived of consciousness, he was carried to the hospital of La Charité, where he is under the care of Professor Velpeau. We are happy to say that, although the injuries are deep and serious, the learned professor entertains no doubt of the recovery of the patient. The assassin has been arrested.

OBITUARY.—On the 19th of March last, at Rio Janeiro, aged 28, Alexander G. Cumming M.D., son of the late John Cumming, Esq., banker, Forres, North Britain.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS I'ANSON, Esq., of St. George's Hospital.

MEDICAL CASES.

CASE IV.

CASE OF APOPLEXY.

George Spicer, aged forty-five, cook, admitted by Dr. Nairne, July 17th, a.m. Face flushed; eyes suffused; superficial veins of face and neck distended; pupils dilated, but capable of sluggish contraction on the application of light; slight squinting observed in both eyes. Pulse quick, but weak and laboured; surface of body perspiring profusely, except the scalp, which is dry and hotter than natural. The patient is completely insensible to external impressions; his breathing is quick and laboured, and accompanied during inspiration with loud stertor; and during expiration the cheeks are blown out with a flapping motion. The leg and arm of the left side of the body are completely paralysed.

It appeared from a friend's account, that this man, who was employed in the Duke of Wellington's kitchen, suffered from a somewhat similar but slighter attack two years previously. That the attack was followed by partial hemiplegia of the right side, from which he had never entirely recovered, so that he often tripped in walking, and appeared to drag the right leg along the ground. That for some months he had been in a dull, heavy, stupid state; inclined to sleep at unnatural hours, and snoring loudly when asleep. His temper had also become more irritable. Indeed, these symptoms had increased so much of late, as to incapacitate him for his work; and he was accordingly about to receive a pension from the Duke. He has always been a free liver, and accustomed to a large quantity of stimulus.

Applic. cucurb. nuchæ ad, ℥x; Enema terebinthinæ statim. Mustard poultices to lower extremities.

11, a.m. The injection brought away a large quantity of feculent matter; and he appeared for a short time after to be to a certain extent sensible, and once protruded his tongue when desired; but the attacks soon began to recur, and were attended with violent convulsive movements, and foaming at the mouth. The squinting became more decided; the pupils more dilated, the left one immovably so, the right one capable of slight contraction. The stertor became louder; the mouth distorted and drawn to the right side; the urine and fæces were passed involuntarily; and at last both sides appeared to a certain extent paralysed. There have been occasionally remissions to these fits; but one has just occurred of a more violent nature than the former ones, and has carried him off.

SECTIO CADAVERIS TWENTY-FIVE HOURS AFTER DEATH.

General Appearance.—Neck very short and thick; shoulders square; body very stout, and loaded with fat.

Cranium.—The external parts were very much congested, and of a dark colour. Some blood, both fluid and coagulated, of a dark colour, was found in the cavity of the arachnoid at the upper surface of the back part of the left hemisphere. Some recently effused blood was found spread over the greater part of the under surface of the right hemisphere; all this had been extravasated in the sub-arachnoid cellular tissue, and in the pia mater. The veins at the upper surface of both hemispheres were large, and gorged with blood. Some fluid, of an opaque colour, was found in the pia mater at the upper part of both hemispheres, where the membranes appeared slightly thickened. The grey substance of the brain, corresponding to the extravasated blood, at its under surface, presented in some places a few puncta of blood, as if the structure itself had been slightly lacerated; but no such appearance existed in any part of the white substance. The ventricles of the brain were much enlarged, and distended with a thin, bloody fluid; and the septum lucidum was so thin, that it had all but given way in some places. The cerebellum was healthy, with the exception of a few patches of blood in the sub-arachnoid tissues at the under surface of both lobes.

Thorax.—Old adhesions were found on the right side. The right lung was loaded with red frothy serum. There were partial adhesions at the back part of the left lung, which also was loaded with frothy serum. The cavities of the heart were much dilated, especially the right; its walls were thin; and muscular structure flaccid. Valves healthy. Blood in the cavities small in quantity, and fluid.

Abdomen.—Liver larger than natural, of a pale fawn colour, but perfectly smooth, and not fatty. Kidneys of natural size, congested, and with granular surfaces. Spleen, nothing remarkable. Stomach slightly congested at its great cul-de-sac, but otherwise healthy. Intestinal canal apparently healthy.

REMARKS.

In a fit of apoplexy the patient is comatose; there is loss of consciousness, sensation, and voluntary motion; the functions of organic life continue to be performed, while those of animal life are suspended, except the mixed one of respiration, the involuntary movements of the thorax being kept up by exciting the pulmonary branches of the par vagum, through the medulla oblongata.

One or more premonitory symptoms are generally observed to precede an attack, such as headach, with vertigo; noises in the ears; tendency to sleep at unnatural hours; heavier sleep than usual, sometimes with laboured, or stertorous breathing; heaviness while awake; irritability of temper; momentary deafness, or blindness; double vision; squinting; faltering in speech; palsy of one limb, or one muscle; loss of memory. Our patient had had some of these warnings in a marked degree. Sometimes the premonitory signs are so slight as to escape notice; but generally, on minute inquiry, one or more symptoms, referable to increased or diminished vascular action, will have been observed.

During the attack there is total insensibility. The breathing is stertorous during respiration; and the cheeks are violently flapped out during expiration; both these symptoms are caused by the insensibility to external impressions; the first is owing to the vibration of the velum palati; the second, to the force of air escaping from the thorax. The pulse is slow and laboured, or it may be quick and hard. The face turgid; eyes suffused; pulsation of the carotids increased in force; limbs motionless. Pupils perhaps contracted; or one may be contracted, the other dilated, from unequal pressure. The sphincters become relaxed, or the muscular coat of the bladder may be paralysed. If it continues cold unequal sweats break out; the breathing becomes more slow and laboured; the pulse more frequent; and death takes place from coma, perhaps complicated with affection of the spinal cord.

The fit may end in three ways:—*In return to health:* here, perhaps, the cerebral texture has not been injured; it may have been caused by temporary stress on the vessels. *In death:* when blood or serum will be found in the ventricles, or beneath the arachnoid; or there may be no morbid appearance; but this last is very rare. *In imperfect recovery:* motion may be limited, sensation benumbed; the mind weak; when, at last, death takes place, there is generally found some extravasation, or the brain may be softer than natural, but this is not constant.

There are three principal kinds of attack. In the first the patient falls down *suddenly*, as if asleep, without sensation or motion, with a flushed face, stertorous breathing, the muscles of one side are contracted, or rigid, or perhaps there may be convulsions. This is the variety with which our patient was attacked. Some patients die soon; and there is generally much blood found extravasated. Others live longer; and there may be only serum found. There may be no lesion discovered—the nervous apoplexy of some foreign writers;—or there may be excessive injection and congestion of the membranes and cerebral structure; this is often sufficient to destroy life in a few minutes, but it is comparatively rare as occurring alone, it is more frequently combined with the next appearance. Serous effusion is very common; it must be viewed as the result of the disturbed state of the circulation, depending on obstruction in the veins, or imperfect

vital action of the vessels. The effusion cannot be the cause of the attack; but the consequence of that state of the circulation on which the disease depends. For we can find no constant analogy between the quantity of fluid, and the symptoms; often when the symptoms are slight, the fluid is large in quantity; and small when the attack is most decided and long continued. The old distinction between serous and sanguineous apoplexy was not well founded; for many cases which exhibited a strong pulse, flushed face, much vital power, &c., have been found to depend on serum; while others showing a feeble pulse, pale face, and other marks of deficient vital energy, have been found to depend on extravasated blood. Some patients recover after this sudden attack; others are affected with paralysis, which may remain for a few days only, or for the rest of life.

In the second or *gradually increasing form* of the attack, the patient experiences pain in the head; with faintness; vomiting; a cadaverous countenance; cold skin; feeble pulse; and other symptoms indicating a serious shock to a vital organ. There may be complete syncope, or only slight confusion with depression. These symptoms soon pass off, except the headache; in a few hours coma appears, and is soon terminated by death. They appear to depend on the rupture of a vessel, causing a sudden shock to the brain, which soon goes off, till enough blood is extravasated to cause the coma. Dr. Abercrombie conceives that at the moment when the rupture occurs, a temporary derangement of the functions of the brain takes place, but this is soon recovered from, and the circulation then goes on without interruption until a sufficient quantity of blood has been extravasated to produce the attack.

In the third form the patient is seized with *sudden loss of power* on one side, generally without insensibility, perhaps there may be loss of speech. It may gradually pass into an apoplectic attack; or the patient may recover quickly or slowly; or he may remain in the same condition till death. There is generally found some small extravasation in the substance of the brain, but it is not constant.

If recovery from an attack take place, we may perhaps find the animal functions restored; but more frequently there is hemiplegia, or paralysis of one side. Paraplegia is much more rare; that generally proceeds from a spinal affection. The hemiplegia is sometimes incomplete; there may be only the arm, and not the leg paralysed; but if it should be complete, and recovery afterwards take place, the leg is the first to recover both sensation and motion. When recovery does not take place, the palsied limb wastes, and is constantly cold from diminished nutrition and circulation. The mental powers become weakened; there is a tendency to weep, and a state of second childishness supervenes.

A post mortem examination generally discovers hemorrhage, from a vessel of some size, within the cranium, more rarely there may be sanguineous exhalation from the membranes of the brain. The vessels of the brain are very liable to rupture, because they receive but slight support from the surrounding structure; they are enclosed in no cellular sheath, and the texture of their coats is thinner and weaker than that of other arteries; they are also very liable to ossific and earthy deposits, and a peculiar state of friability.

When extravasation happens, it may be, as generally happens, in the substance of the brain; or on its external surface; or in the ventricles. When it is in the substance, a cell or clot is formed, varying according to the amount of extravasation. If the extravasation be large, the blood generally forces its way either to the external surface of the brain, or into the ventricles. If it remain in the cell, in a few days the serum becomes absorbed; the clot is then firm, and of a dark colour: it afterwards lessens, and assumes a pale hue. There is increased vascular action in the surrounding cerebral structure, causing lymph to be thrown out, and a lining membrane is thus formed for the walls of the cell. According to the French writers, in the course of time the clot may become completely absorbed, the walls approximate, and a cicatrix be formed; but Dr. Abercrombie appears never to have met with an instance of the kind. If the clot have been very large, there will always remain a cell or cyst, generally partly filled with fluid. Very rarely, though this does occasionally happen, the clot becomes organised. Still more rarely does the clot excite suppuration in the surrounding cerebral matter. The most frequent situations in which the clot is found are, the corpora striata, optic thalmi, and their neighbourhood; thus appearing to depend on the greater number of vessels, and less degree of consistency in these parts. Sometimes external extravasation may be small in quantity, and only between the convolutions; or else it may be spread over one hemisphere. Sometimes the extravasation may be only in one ventricle, and no where else.

It is generally found that the extravasation is on the opposite side to the hemiplegia, though some rare exceptions to this rule have been observed. The reason of this crossing over, as it were, is said to arise from the decussation of the fibres of the right and left anterior pyramids, at the junction of the medulla oblongata and medulla spinalis; but it has not been satisfactorily ascertained as yet so as to place the point beyond dispute.

Certain causes appear to *predispose* to apoplexy. One of the chief is, perhaps, hereditary right. Also a short thick neck; a short stout build; much fatness; the advance of old age; a large head and red face. But it often occurs in the opposite conditions. Even disease of the heart or lungs, which impede the free circulation through the brain, will predispose to it. Granular kidneys, also, in which the urea circulates with the blood through the brain; the cessation of habitual discharges; intemperance.

The chief *exciting* cause is augmented force of the heart's action, thereby increasing the stress on the cerebral vessels; also straining, coughing, &c., which impede the respiration, and distend the veins of the head; excitement, compressing the jugular vein by tight neckcloths, hypertrophy of the left ventricle; but Dr. Watson imagines this is only a concomitant effect of the same cause which produced the cerebral hemorrhage, viz., ossific deposit, which, occurring in the aorta, causes dilatation of the vessel, and consequent hypertrophy. Again with hypertrophy in the left, there are generally changes in the right ventricle, which lead to obstruction of the blood in the veins, and thus excite the disease.

Prognosis.—The attack may be fatal directly, or in a few hours; or, after the attack has gone off, reaction may be fatal, by inducing a second attack; by softening of the surrounding cerebral substance; by exciting inflammation of the membranes of the brain, or of the ventricles; or by the exhalation of serum. If the attack continue for more than twenty four hours, with an intermitting pulse, urine and fæces involuntarily discharged, the coma profound, breathing stertorous, with foaming at the mouth; convulsions, hemiplegia, a fixed or unequal state of the pupils, a fatal termination may be expected. The most favourable signs are the accession of accustomed discharges, as of the menses, piles, epistaxis, a general diaphoresis, and the early decline of the symptoms.

Diagnosis.—The symptoms of the attack differ but very little from those of poisoning by narcotics, asphyxia, drunkenness, concussion of the brain, organic disease within the head, some complications of fever, or coma consequent on epilepsy or hysteria. The occurrence of paralysis would make the nature of the case evident; but it must be remembered that hemorrhage may occasionally occur without being followed by palsy. Therefore the last resources on which we are thrown are the circumstances connected with the history of the case, and previous state of mind of the patient, and by these we must often be guided.

The general rules of *treatment* are, that if coma be present we should bleed; but if syncope, we must stimulate. We must look particularly to the pulse; if it be full and hard, and the face flushed, we should bleed. Even if the pulse be small, and the face flushed, as in our patient, we should bleed, as the state of the pulse generally depends on a weak heart.

We must bleed, so as to take the stress off the cerebral vessels, as we are not sure that injury has yet been done to the brain, and we may thus avert extravasation. Even if rupture has taken place, by making a quick impression on the circulation, we diminish the force of the current of blood through the head, and thus favour the arrest of the hemorrhage. If the heart appear diseased, from a small pulse and full veins, local cupping and leeches will be most appropriate. We must also purge freely with calomel, if the patient can swallow; croton oil, if he cannot, and give stimulating enemata, so as to get watery stools, thereby relieving the loaded state of the bowels, and emptying their capillary vessels.

To remedy the palsy, time must be allowed, with occasional small doses of mercury, aperients, and a state of quietude.

REVIEWS.

Transactions of the Medical Society of London. New Series. Vol. I. Highley, Fleet-street. 1846. p.p. 221.

The Medical Society of London is the oldest public society of the kind in the kingdom. It was founded in 1773, and fourteen years subsequently, commenced the publication of its "Memoirs" in serial order. The first published paper was from the pen of the celebrated Dr. Lettsom, on the Character of Æsculapius. When six volumes had been issued, the series stopped for a time, and twelve years elapsed before the seventh volume was completed. Since that time, now twenty-eight years ago, none of the papers brought forward at this Society have been officially presented by it to the medical public. This is the more to be regretted, because it has been the frequent occasion of contributions to the literature and science of our profession, which would have done honour and service to the age producing them. We are gratified, however, to find that the slumber has passed away, and that the Medical Society of London is bestirring itself, not more for the advantage of its members than for the benefit of the profession at large. The volume before us is the commencement of a new series, which we heartily hope will run a longer and more prosperous course than its predecessors. At least it well-deserves to do so, and, therefore, in giving it our greeting, we wish it every success and continuance.

The articles, twenty-two in number, which compose this volume, are all marked by a character of scientific precision, or of practical usefulness. Some of them are of very considerable value, and embrace a detail or a discussion of the most recent discoveries in anatomy, physiology, and pathology. Others of them come more immediately and simply within the reach of the medical and surgical practitioner, and to him will be found abundant in useful hints and directions, which the obligations of every day will give him full opportunity of applying.

We cannot close the volume without an approval of the manner in which it altogether is got up— nor without again expressing the hope that it will be followed by very many others in all respects as worthy.

TO CORRESPONDENTS.

A Reader *writes us a strong letter expressive of his disappointment on perusing the new work of Dr. ——, recently published by ——. He had purchased the work on the faith of a very laudatory critique that had appeared in a medical journal, and was astounded to find that it possessed none of the characteristics attributed to it. "A Reader" accounts for this contretemps by the fact that the book reviewed and the journal reviewing are in the same publishing hands, and he wishes to warn the public against being made the victims of so ingenious and convenient a system of bibliopolic enterprise.* *** *Our correspondent only touches half the evil. Journal publishing booksellers not only puff in their own journals their own books, but are obliging to each other on a mutual aid system. The medical review system has been for a great number of years corrupt to the core. It has been almost wholly under the direction of the book-*

sellers, and managed for their benefit. Out of the many medical journals, indeed, set afloat during the last quarter of a century, the only one not in the hands of a publisher or bookseller is THE MEDICAL TIMES.

Radix Rhei *misemploys on elaborate badinage time and perhaps talent that could be wisely given to professional studies.*

Medicus.—*There is no law to prevent a licentiate of the Apothecaries' Hall practising any branch of the profession; nor is there any law that makes the diploma of the College of Surgeons obligatory.*

A Student.—*The first Examination at the University of London for the degree of B.M., will commence on the first Monday in August.*

R. P.—*The pay of an assistant-surgeon in the army, of less than ten years' actual service, is 7s. 6d. per diem.*

A Member of the College in Lincoln's-inn-fields *sends us some just remarks on the late sale of an examinership; we do not, however, see that our correspondent has placed the subject in any new light.*

A Surgeon *will find all information respecting the treatment of wounded arteries in the Lectures by Mr. Guthrie, now in course of publication in the* Medical Times.

C. S. *should send to Mr. Bailliere, in Regent-street, for a catalogue of French works. We would not undertake to make the choice for him he seeks.*

The private note of J. P. has been anticipated.

The case of pleuro-pulmonary fistula, by Dr. Browne (37th regt.) will be inserted next week.

***THE MEDICAL TIMES** is the only Medical Journal published at its own Office, and which is free from the control of all Booksellers and Publishers. Gentlemen may procure it by an order on any Newsman or Bookseller, or it will be sent direct from the Office of the Medical Times to Annual Subscribers sending by a Post-office order, directed James Angerstein Carfrae, or an order on some party in town, One Guinea IN ADVANCE, which will free them for twelve months. Half-Yearly Subscription, 13s.; Quarterly, 6s. 6d.*

THE MEDICAL TIMES.

SATURDAY, MAY 30, 1846.

——————Quod medicorum est
Promittunt medici.

HORACE.

WE are desirous of drawing the attention of our readers to a speech made by Mr. Macauley, on last Friday night, in the House of Commons. The arguments employed by that learned gentleman in favour of limiting the daily period of factory labour, are so closely analogous to the reasonings we have used in this journal on the subject of quackery, and so aptly and incontestably affirm the duty of the state to interfere with private rights, in order to protect the general welfare, that we are happy in having this opportunity of applying them to the collateral iniquity of unqualified medical practice, which in this country yearly sacrifices its hecatombs at the shrine of Mammon. The injuriousness of prolonged factory labour is a trivial evil compared with the monstrous fraud and peril which characterise the system of illegal medical practice. Its senates are now convulsed with the determination of the question—how imperious should be the claims of humanity in demanding from the legislature the suppression of a wide-spread and terrific system of manslaughter! The legislature must eventually prohibit quackery. Every fresh act of the Government tends to this end. We rejoice to perceive that statistical legislation is falling into desuetude; that men are no longer estimated by sections—numbered in masses, valued according to the producing powers of the class, and manœuvred like machines, or the pawns on a chess-board, to produce some grand combination of legislative sagacity. The science of government was, a few years since, little better than a process of mathematical computation, and the components of society were esteemed only as so many automata to be directed and distributed as the calculations of the minister might determine. That men should have passions, fears, hopes, and affections, was never dreamed. These were considered altogether foreign to the question, and could not be admitted as elements of calculation, without causing embarrassment and disturbing the harmony of the plan. The statesmen of that day governed with the head and disavowed the heart; and the result was that the heart of the people disavowed the head of the statesman. Men must be ruled as men—as beings endowed with other, ay, and nobler faculties, than mere physical strength and dry understanding. Sound legislation will ever recognise and appeal to the affections of the people. The minister must enunciate his oracles through the twin lips of humanity, and the people will respond to the echo.

There is a rapid reaction in the cause of humane legislation, and the able speech of Mr. Macauley was one of the most distinctive, and refreshing "signs of the times," we have, for years past, had the pleasure to witness. A fortnight since, we endeavoured to show that it was the duty of the state to prevent illegal practice, and that the state had a perfect and indestructible right to restrict individuals from doing or aiding in any act that might be injurious to other members of the community. We exploded the foolish dogma of a "*citizen's right*" to administer poison to any man who might be idiot enough to require it from him. We are aware that that article excited a great commotion among certain parties interested in the issue of the subject of which it treated; but the arguments have not and cannot be controverted. Truth will always give pain to those who have been for years acting in error. The eye accustomed to darkness, cannot bear without anguish the flood of light which may be suddenly poured upon it; and we are informed that the Council of the Pharmaceutical Society were thrown into dire consternation when the article in question appeared at their benighted board. We shall, however, reserve a few more remarks for them at a future time.

The arguments and illustrations adduced by Mr. Macauley in evidence of the right of the state to interfere with private rights in matters concerning the general welfare, were beautifully just and appropriate. He referred to the new Act for regulating the construction of buildings, and showed that an individual is now dispossessed of his right to build even upon his own land any kind or dimension of house that he pleased, but, on the contrary, must take care that his court-yards are of a specified size, that his cellars are well drained, and due means adopted for ample ventilation of the structure. He must also keep it in due repair, and well white-washed, or the district surveyor can order him to do it, and if the proprietor still decline or delay, the surveyor can send in men to do the work, and afterwards compel the owner to pay the expenses. This power is exercised for the preservation of the health of the community. The Government also possess the power of punishing the keepers of gambling houses, and have suppressed lotteries, not because they are injurious to the Government, but because they are hurtful to public morals. The argument which Mr. Macauley has quoted from the mouth of the gambler or lottery holder, is also, for ever, in the mouth of the quack and his dupes—viz., "You may not approve of my acts, therefore do not commit them: if I do not interfere with you, why interfere with me? You may do as you please, and I will do as I please—this is a private right."

This is the only argument which the advocates of quackery ever use to bolster up their iniquitous pretensions to public support. We thank Mr. Macauley for his powerful advocacy of the cause of humanity and common sense. No individual should be permitted to exercise any private right manifestly injurious to the health or morals of the community; and the more highly civilised society becomes, the more it is pervaded by enlightened sentiments of mutual dependance and protection. The more the councils of its legislative body are regulated by just views of its parental as well as economical ministrations—of its duties to the man, as well as to the state—the more shall we find that the legislature will exercise a wise discretion in forbidding the indulgence of those personal rights which are productive of great social calamity.

The question of the suppression of quackery and of unqualified practice in all its aspects, has never, except in our own pages, been treated upon its merits. A cry of "protection" has been raised on the part of the Profession, and of "private right" on the part of the quack; but all argument on both sides has been either adroitly evaded or imprudently omitted; so that, for aught that the public can ascertain about the matter, the impudent empiric may have the better claim to sympathy and support, inasmuch as the cry he has employed is more congenial, more popular, and more ensnaring. This private right, or citizen's right, as it may be called, is one of those principles, which, although just in the abstract, is false in the application. Some people consider any act not expressly forbidden by law as a private right, and acknowledge no moral or social restraints that are not provided for in Blackstone. Such is the present excellence of our code of laws founded upon the experience of numerous ages, and built up by the sagacity, forethought, and wisdom of some of the noblest minds that have ever adorned humanity, that a rule can be generally found to meet every possible case—a penalty is decreed for almost every infraction of moral obligations; nevertheless there are still some deviations from the standard of rectitude which the written law does not recognise, and for which, consequently, it denounces no punishment.

The legislature has been inclined to deal tenderly with personal freedom; for, when a people have sedulously succeeded in emancipating themselves from the tyranny of barbarism, they are peculiarly jealous of every infringement of their newly acquired privileges; and the Government are equally as cautious not to awaken unnecessary perilous suspicions. The sound of the battle cry often dwells in the ear, and perpetuates hostilities long after the cause, the necessity, and the reason have been buried in the tomb of oblivion. In proportion, however, as society grows complicated in its relations, and interests more numerous and conflicting, danger threatens even from the exercise of these private rights. There must be privation, restraint, and penalty, or there can be no safety in possession, no real enjoyment in liberty, and no confidence in justice.

We must demolish this baseless fabric of "*private rights*," and dissipate the pernicious hallucination of "*free trade in physic.*" The people must be taught better—the minister and the Government must know better; and it shall be our duty to enlighten them so far as to penetrate them with shame whenever they resort to such verbiage to uphold a disgraceful policy. Let no man think that this is an unnecessary task, inasmuch as the argument is too clear to admit of dispute. They are mistaken; the ministers of the crown, past and present, profess this heresy against reason, and they not only profess it in words, but they carry it out in deeds, as the late medical bills abundantly evince. Common sense must be heard; and until it is heard, we shall never exorcise this bugbear of private right. We pledge ourselves to the issue.

Sunt lacrymæ rerum, et res item mortalia tangunt.
VIRGIL.

OUR last article on medical mendicancy was devoted to a consideration of the frequency, and seeming fidelity, with which ingenious impostors feign themselves to be doctors in distress. We gave some cases in point, and suggested, also, an available means of detecting the roguery. We mixed a little pleasantry with the subject, for it was one which did not deny the introduction of enlivenment. This we threw in as a sort of seasoning, or palate-prompter, to such as might find the bare material too tasteless to be tempting. Would that we had never a less gracious or gratifying duty to perform! We belong to the class who prefer merriment to melancholy, and would far rather welcome the smiles, than the tears of this life. We abhor gloomy subjects, as we dread gloomy days—they seem to impart something of their own horror to us—they never scowl upon one's being without leaving us their likeness for company. Shadows may be very fine things to those who are fond of them; thank God we are not—sunny pictures, to our taste, are the sweetest to look upon!

It would seem, however, that light and darkness are not more necessary to the well-being of the physical world, than alternations of pleasure and pain are to the intellectual. Metaphysicians tell us that the mind is not constituted to bear more than a certain intensity or extent of joy—either, exaggerated, carries danger with it—a fatal poison, that, like the serpent basking in the flower-bed, is not the less venomous because of the beauty that enshrouds it. We may be thankful, therefore, that our nature is not precisely that fabled of Momus, or like him, we might suffer an unpleasant penalty for the indulgence of it.

Little as we relish sombre subjects, we are compelled to regard them when they are thrust in our way. It is not venial to gratify inclination that is in any wise the antagonism of duty. This must be fulfilled, however its performance may be adverse to our feelings. It cost us no anxiety, and caused us no sorrow, to dilate upon the tact and trickery of that pauperism, which, as an imposture, finds its way into our ranks—we rather liked the recital, because there was nothing in it that could harrow our feelings, when our hearts held no sympathy with the affected sufferings it revealed. It was the sunny side of a picture whose objects were worth smiling at. Far other is it with that dark contrast we must needs for a moment dwell upon—where there is no affectation, no imposture, no feigning, but all is a stern reality, terrible in its recital of distress! There is something of amusement in detecting the artifice of the mendicant who essays to swindle you out of your bounty; who thinks it no crime to filch the money from your pocket, it being provided that he politely makes you cognizant of the act; but there is nothing of gratification in listening to the opposite of such a man,—in being awakened by that unpretending pathos of the heart, which borrows none of its eloquence from the sources of language and thought, but finds it singly and sincerely in the touching accents of woe. Such cases are, unhappily, of less rarity than we could wish for. At the best they are bad enough, but pitiable, painfully pitiable, indeed, are they, when they come before us in contrast with what was once a happier state of existence. This is never more strikingly shown than in the destitution of a member of our own profession. Mercy, it is a sickening sight to look upon a ragged form, that was once respectable and respected amongst the best of God's creatures—to see a heart, bowed down and breaking with care, that once only beat with the impulses of comfort and of happy feeling—to witness a mind, slowly sinking into ruins, that was once noble, and dignified, and worthy to be called immortal—painful, indeed, is such a sight as this, and yet how often do we witness it! It is one of the living, loathsome truths that taint the character, and test the condition, of the profession to which we belong. It is a foul stain upon us—would it were everlastingly blotted out! The causes may be numerous, and doubtless are so, but whether fortuities or faults, they are most deeply to be regretted. Certain however, it is, that it cannot be a healthy condition which is so much liable to morbid change and mischief. There must be some evil at the core, or the whole organism would not exhibit these specks of rottenness. What the secret mischief is, how it has risen, and how it is to be remedied, are questions neither to be asked nor answered in this place; but we may at least go so far as to hope that some future scheme of legislation, political and professional, will place us upon a footing more stable and honourable than at present we occupy. The consummation is loudly called for—may it speedily be effected!

In the mean time, let us inquire into the amount of poverty and destitution that at present prevail amongst us. Every day brings fresh and more fearful proofs of them to our doors. We are familiar with various examples of practitioners, once respectable and in fair practice, who are now glad of twenty shillings a-week and the habiliments of policemen; many we know and hear of, who, *from* a decent and deserved position as reputable country surgeons, have been reduced to the situation, and glad enough to get it, of inferior clerks on railways; many more, we know, there are, who, not having the chance of exchanging one pursuit in life for another, are now daily supplicating the bounty of professional brethren whom they once rivalled in respectability and amount of income. It is not long since we were applied to for alms by a man whom we had known in his days of prosperity as a surgeon in a rural district. At the time we allude to, he was the sole practitioner in a village numbering some three thousand inhabitants. Additionally to private practice he held various clubs, which brought him in a very desirable income. He had lived thus for some years, with a family gradually increasing about him when he was rivalled by a new comer, who, additionally to the College and Hall diploma, had got some doctor's degree or other. He announced himself as one of the "New Lights"—a physician now, a surgeon then, a man-midwife at any time, and, he ought to have added,—a rascal always! He commenced disputing the ground with the old occupant by offering to take his clubs at sixpence a member less than the price then paid. This, of course, was successful, and the sick societies soon changed hands. He then made an onslaught upon the private practice of the old resident, by systematically visiting his patients, inquiring his charges, and then, after enunciating his own personal importance, offering to do the work of his fellow-practitioner at any rate of reduction the people might like. By this system of fraud he so completely possessed himself of all that was worth having in the territory, that the poor fellow he supplanted was at last fairly driven away by accumulating debts, and reduced to the condition we have described. The rate, however, at which his rival went, proved too much for his pocket, and himself was shortly compelled to leave the scene of his treachery, *minus* some hundred or more pounds he had taken to back his villany with. Of course, he could not get a living by the terms he offered; but he thought, having made himself sole master of the field, he might then charge according to his whim. Just as he was adding this knavery, to the former, himself was rivalled by another comer, whom the people gladly patronised, from a growing dislike of the adventurer who had duped them. This said individual shortly found an asylum as assistant to a neighbouring practitioner. He has our hearty wish that the rest of his days may be passed in degradation and drudgery. And we can only add the further hope, that his fate may be that of every other vagabond who may similarly disgrace an honourable calling.

A case, not unlike the one just cited, both in cause and consequence, has lately occurred to our knowledge, in the person of a highly creditable country surgeon, who having been fairly swindled, first out of his public, and then out of his private practice, by a scion of sneakishness, was at last thrown helplessly and hopelessly upon the very parish to which he was once medical officer!

We meet with instances, again, of members of our fraternity being reduced, or perhaps ruined, by certain unavoidable circumstances—it may be increased competition, and the consequent loss of a certain portion of practice—it may be increase of expenses, as an augmenting family, without a corresponding improvement in professional income—it may be losses by bad debts, speculation, or any of the thousand circumstances that are always found much more efficient in emptying a man's purse than in filling it for him. So many and so various are the causes liable to operate temporarily or permanently against the worldly well-being of the medical man, that it can be no matter of surprise ruin should be the fate of numbers of us. An illness of a few months' duration, which, to a mechanic who may be a member of a sick society, matters comparatively little, may prove ruinous to a medical man, and, indeed, to our own knowledge has often been so. Let him have no ready money to pay current debts—no friends of whom he can borrow it—no available amount of credit—and plenty of rivals ready to take the practice that a sickly hand forbids him grasping—and when he leaves his bed, it is only to find his opportunities forestalled, his services unsolicited, and himself a pauper in the very arena of his previous success. The history of physic is full of such cases. Mendicancy thus arising is surely sufficient to call forth every sympathy, every bounty, we have to bestow.

To relieve poverty is certainly very excellent; surely not so much so as to prevent it. It is very good to supply a hungry man with a meal, but it

is much better to provide that he shall not know the want of one. Some such provision as this, made with no niggardly hand, is a resource we want for the exigencies of our needy brethren. Many a man amongst us has been ruined by a shadow of ill-fortune merely passing over him—could he have been sustained and supported till the cloud had passed away, he would have stood as safely, and free from prejudice, as before it visited his presence. We have known such, and have grieved that we had no professional exchequer from which the hand of benevolence might draw some bounty to save a friend and fellow-practitioner from ruin! Oh! it were a sublime, a holy duty, to do thus much for one of ourselves. Bound as we are by a common tie of education, etiquette, purpose, and professional regard, ought we not to strengthen the bond, by cultivating a worthy regard for each other's prospects? To do this would be to avoid hurting a fellow labourer by any act of injustice to him, and to be his friend whenever the hour of adversity might make him the subject of our compassion. No man can be sure of not needing such charity. We sincerely hope that all "good men and true" amongst us will take these scattered hints into their keeping, and improve upon them by practical application. The General Medical Annuity Fund proposed by Mr. Daniell is just the scheme to answer this great end. Let it be largely and liberally subscribed to, and we shall have the honour and happiness of knowing that destitution and despair are being fast banished from amongst us.

THE NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

We take the earliest opportunity of informing our readers that the schedule for polling the members of the Profession on the subject of the New Institute is prepared by the Committee, and ready for immediate circulation. This is scarcely a time for exhortation, since the necessity of co-operation has been so repeatedly urged in the pages of this journal, that every individual interested in the matter must be fully convinced of the importance of the duty which he is now called upon to perform. The Committee have earnestly and devotedly exerted themselves in the performance of their laborious duties, and it is but mere equity for the Profession to render them their support in this great undertaking, and encourage them in their disinterested career. There is a debt of gratitude due to these gentlemen, which nothing but the *unanimous approbation and confidence* of their professional brethren can adequately meet. This is the moment for the Profession to show their sense of the past labours of the Committee, and their confidence in them for the future. We fully hope to see TEN THOUSAND General Practitioners engage to contribute to the formation and maintenance of a "National Institute of Medicine, Surgery, and Midwifery."

Nothing can be done unless the Profession *help themselves*. The Committee of the National Association may deliberate, counsel, and execute; but the Profession must labour also, and show by their energy and determination that they feel their interests hazarded, and will not rest until they have placed themselves in a secure and honourable position. The Profession must move onwards with the Committee as coherent parts of one united body. Sluggishness or indecision will be now fatal. The General Practitioners must display an *esprit du corps*—a professional spirit—by uniting in a common league in defence of their common privileges. This is truly a momentous period in medical reform.

MR. WAKLEY.

This gentleman recently addressed a request to the Committee of the National Association, to favour him with a card of admission to the public dinner to be given to Mr. Pennington by the members of the Association of which he is the worthy president. Although Mr. Wakley continues a member, nominally, of the society, the request was thought so singular that the application was made the subject of special consideration by the Committee. After some discussion, the gentlemen present, who included Dr. Webster, of Dulwich, Mr. Clifton, Mr. Nussey, the Honorary Secretaries, and nearly every other member of the Committee, came to the *unanimous* resolution, that, although a member of the body, Mr. Wakley's conduct had been of so —— a character—we would fain avoid the characterising word—that they would not consent to his admission to the dinner table. If the honourable gentlemen were not ignorant of the state of Professional feeling, he *could* not have committed himself to an application which every body might have told him was sure to entail a somewhat disagreeable result; but the subject, like another we referred to last week, is so "pregnant with melancholy reflections" that we are glad to leave it without one word of painful commentary.

THE PROPOSED COLLEGE OF PHARMACY.

We understand that a semi-official meeting has taken place between the authorities of the College of Physicians and a deputation from the Council of the Pharmaceutical Society on the subject of the proposed College of Pharmacy. The bill intended to be submitted to Parliament was laid before the Collegiate dignitaries, and met with their approval—it being stipulated that the Court of Examiners should be composed of one-half Physicians and one-half Chemists and Druggists. This unholy alliance will receive our attention next week.

THE ROYAL COLLEGE OF SURGEONS.

It has been asserted, in a quarter well informed on such matters, that Government have given the Council of this unfortunate College the assurance that, in the event of any deficiency arising in the receipts of their Institution by the success of the National Institute about to be established by the Profession, they would think it their duty to recommend to Parliament, that a grant of money should be made annually towards making up the difference. We have no doubt that the assurance was given; and the fact indicates on the part of the *Premier* that the success of the New Institute does not appear to him, or to the Council, at all an improbable event.

Royal College of Surgeons.—The museum of this college has just been greatly enriched by the addition of Mr. Goadby's collection, which has been presented to the Hunterian Museum by a committee of gentlemen selected from the body of subscribers, amongst whom was H. R. H. Prince Albert, who sent £20. The sum originally intended to have been presented to Mr. Goadby, for his unrivalled collection was £500, but we are sorry to find it amounts to little more than £400.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Meeting of May 12, 1846.

Benjamin G. Babington, M.D., F.R.S., Vice President, in the Chair.

On the Relation between the Constituents of the Food and the Systems of Animals. By R. D. Thomson, M D, Lecturer on Practical Chemistry in the University of Glasgow. [Communicated by Sir B. C. Brodie, Bart.]

The first individual who showed that wholesome food should contain matters identical with animal substances, was Beccaria of Bologna, who wrote an excellent paper on the subject in 1742. Dr. Prout has taught and extended this view for more than twenty years, and his opinions are now followed by all physiologists. That the systems of animals are capable of sustentation by a supply of fibrinous matter alone, is obvious from the history of the primitive inhabitants of the prairies of America; but it appears from experiments made on the nutrition of animals with pure fibrin, that an auxiliary in the production of animal heat is either indispensable or advantageous, since animals fed on fibrin alone invariably declined in health—(Magendie). That the amount of *calorifient*, or heat-producing food, in contradistinction to nutritive food, properly so called, as it has been well-defined by Liebig, is out of all proportion greater than that required to supply the waste of solid matter of the body, is obvious from an experiment made by the author on a cow, in a state of rest, in which it was found that 15¼lbs. of food were taken into the circulation in one day. Of this, only 1¾lbs. was nitrogenous or nutritive food, the rest being *calorifient* and saline. From this experiment, frequently repeated with nearly the same results, the author concludes that in such a condition of the system, the natural relation of the nutritive to the calorifient constituents, is nearly as 1 to 8½. The author gives formulæ for calculating the amount of nutritive and calorifient food, with a view to determine the laws of dieting. He also gives tables, from his own analyses, of the amount of nutritive matter in about twenty different kinds of vegetables (principally farinaceous food). By these it is shown that oatmeal consists of 1 nutritive and 5 calorifient matter, and barley 1 and 7—facts which explain the universal employment of these substances. From these tables it is also inferred, that as milk is the natural food of the infant mammalia, the constitution of their food should be formed on the same type, and that the use of arrow-root or starchy food, where the relation of the nutritive to the calorifient matter is as 1 to 26, instead of being as in milk 1 to 2, is opposed to the principles attempted to be established by the author. He observes that, in nutritive tables, it is usual to give a column of equivalents—representing, for example, 100 parts of beans as equal in nutritive power to 1160 of starch; but, according to the author's views, such a method is not founded on scientific principles. In a correct plan of dieting, a proper equilibrium must be maintained between the wants of the animal organism and the constitution of the food. The importance of this view is supported by the results of an extensive series of experiments, made by the author with different kinds of food upon cows. These results are highly interesting, and were given in a tabular form, but our limits will not allow us to detail them at length.

The author concludes by observing that, when more condensed forms of vegetable are required, the object might be obtained by mixing certain portions of American flour with different kinds of meal, which could not otherwise be raised by fermentation; for example, by mixing equal parts of flour and oatmeal, flour and pease or barley meal, excellent bread could be formed; and two-thirds of Indian corn with one-third of flour yielded an excellent loaf.

Specimens of these different forms of loaf were exhibited before the Society, and, considering it was only the second attempt of the baker, they were very creditable samples of bread.

Dr. Snow said that, although he considered the

experiments of Dr. Thomson a great addition to science, yet he thought it would be very unsafe to follow them in dietetics. In the present state of our knowledge we ought to be guided entirely by experience. It was true that a farinaceous diet did not agree with very young children as a substitute for milk—so far experience agreed with the deductions drawn from the tabular view; but if the chemical constitution of the milk was to be a guide to what should be the food which ought to follow weaning, we should have to adopt a dietary altogether new for children; as they were unable to digest beans, it would have to be an exclusively animal one. That the chemical constitution of milk was no criterion of that of the food which ought to follow, was evident from the circumstance that there was the smallest possible difference between the milk of the graminivorous and carnivorous orders of animals, and yet no sooner did the young of these various orders leave off sucking than they betook themselves—some to coarse vegetable food, and others to live exclusively on flesh, their specific differences of organisation, at first but little marked, having become more fully developed. Dr. Thomson had spoken of the non-nitrogenised elements of food—starch, &c.—as being consumed in respiration for the development of animal heat, and as taking no share in nutrition, unless, indeed, to be stored up as fat. But a consideration of the whole question would compel us to coincide in the opinion of Dr. Prout, that these saccharine elements of the food, as they were called by him, were capable of uniting with nitrogenous products of the bile, and thus contributing to repair the waste of the fibrinous tissues; and that the graminivorous animals, many of which were amongst the strongest and fleetest of the animal kingdom, and had a temperature lower than most of the carnivora, were not obliged to burn the greater part of their food merely as fuel in the lungs, without its having served any other purpose.

Mr. Pigot suggested that, although precedence had been given to Dr. Thomson's paper, the entire evening should not be occupied in discussion upon it; he was the more anxious for this because he and several other fellows had come purposely to hear another paper read.

Mr. Davis remarked that the question, whether the paper which had just been read should have been brought forward at all, might form a subject for future discussion, but he apprehended, as the paper had been read, the consequent discussion could not be stopped if the fellows were desirous to carry it on. He then adverted to the difficulty of finding a proper succedaneum for the natural food of infants after weaning, and observed that the great error consisted in using a substitute too much thickened with arrow-root, or something else of that kind. He thought diluted milk would prove the best substitute, the degree and mode of dilution being made dependent on the constitution, &c., of the infant.

Dr. Golding Bird expressed his admiration of the great industry and patience displayed by Dr. Thomson in his laborious researches, but took exception to the conclusion of the author on the applicability of his deductions to the dietary of persons in sickness or health. He reminded the Society that, up to the period of Liebig's researches, it had been customary to regard the proportion of carbon existing in different articles of food as an index of their nutritive powers. That celebrated chemist had shown, however, that such a view was erroneous, and that, with the single exception of the adipose [illegible] the structures of the body were supported, and their waste supplied, by the more nitrogenised elements of food. The great merit of Dr. Thomson's paper consisted not in any novelty, but in the enunciation on satisfactory grounds of the fact, that animals not only could not be well nourished on nitrogenised or carbonised food alone, but that a certain proportion should obtain between these two kinds, so that food rich in nitrogen might supply the waste of tissue, while that rich in carbon might afford by its combination in the body a source of animal heat. Dr. Bird objected to the induction that the composition of the food of infants, animal or milk, afforded any certain guide to the selection of nutriment for the adult, for whilst the infant cat, sheep, and porpoise were actually nourished on a milk of nearly identical composition, how different were the nutriments sought after and devoured by the carnivorous, herbaceous, and cetaceous adult! If the tables of Dr. Thomson were to be trusted, it is obvious that next to milk the most nutritive food during infancy, and for convalescents, consisted of beans and peas, far superior to flour or arrow-root. Yet who would venture to act on such a principle. Again, whilst bread was below beans and peas in nutritive power, according to the tables, the addition of cheese would afford a due supply of nitrogen, and theoretically raise it high in the scale of nutriments. Yet who would feed infants or convalescents on Welch rabbits? Admitting the value of Dr. Thomson's paper, and fully bearing out his views on the possibility of starving infants on arrow-root, by cutting off the supply of nitrogen, Dr. Bird contended that something more than abstract chemical principles must be taken into consideration in arranging the diet of our patients; the facilities of digesting different kinds of food were never to be lost sight of, and the fact of the vital endowment of the stomach preventing all the laws of the laboratory coming into play in its cause must never be forgotten by the physician.

After the meeting, Horne's patent safety enema apparatus was exhibited.

The advantages of this apparatus were stated to be, that the pump being quite distinct from the injecting pipe, no fluid could pass through it, and, therefore, neither clogging nor corrosion could take place, so that the instrument is at all times clean, in proper order, and fit for use. When worked with a moderate force, it injects the fluid in an uninterrupted and well-sustained stream, free from all violence, but should occasion require it the force can be increased. By its smooth action, and the continuousness of the stream, there does not result any jutting of the fluid against the bowels; and if the patient should feel uncomfortable while using it, by merely turning the cock its action is immediately arrested.

As no air can pass with the injected fluid, and no fluid can by any possibility escape from the apparatus, it admits of being used in almost any position.

AMORPHOUS QUININE.

A translation has been published in a recent number of the Lancet from Baron Liebig, on amorphous quinine, as it exists in the substance known in commerce as quinoidine.

In the preparation of sulphate of quinine, after all the crystals which can be obtained are separated, a dark-coloured mother-liquor remains, having an extremely bitter taste. On the addition of an alkaline carbonate, this liquid loses its colour and bitter taste, depositing, at the same time, a yellowish-white, or brownish precipitate, which, after having been rinsed with water, and exposed to a gentle heat, agglutinates into a coherent mass, exhibiting the appearance of resin, possessing the properties of a base; it neutralises acids perfectly; but the salts which are formed by these combinations with acids, have baffled all attempts at crystallisation.

Sertuerner, who was the first chemist to separate this resinous substance from the mother-liquor of sulphate of quinine, considered it to be a distinct and peculiar organic base, existing in yellow and red cinchona barks, associated with quinine and cinchonine. He assigned to this, as he supposed, new substance, the name quinoidine, and greatly extolled its medicinal efficacy, in which he declared it was in all respects equal to quinine.

Subsequently, this substance, under the term quinoidine, has been employed medicinally in many places, and even introduced into the lists of commercial articles or price currents of many druggists in Germany.

In certain mother-liquors of quinine left in the preparation of the sulphate, which were analysed by Henry and Delondre, and also a sample of quinoidine examined by Geiger, these able chemists discovered an amount of quinine and cinchonine, accompanied by a resinous substance, which they considered impeded the crystallisation of the sulphates of the two bases, and which in their experiments they failed to separate.* The results obtained by these chemists, and the inferences obviously deducible from these results, rendered it indubitable that the medicinal efficacy of quinoidine must vary according to the greater or less proportion of quinine it may happen to contain. Now, there cannot be a doubt but that this uncertainty with respect to the relative amount of quinine in commercial quinoidine, has prevented many physicians from prescribing the latter as a remedy, notwithstanding the testimony borne to its efficacy.

M. Liebig obtained a sample of quinoidine, with a view to prepare from it quinoleine—a substance discovered by Gerhardt to result from the transformation of quinine, and which Professor Hoffmann has ascertained to be identical with leucol, one of the components of the essential oil of tar, prepared from anthracite coal. He considered that a very simple method of testing quinoidine for the amount of quinine it might contain might be based on the property of quinine to be transformed in quinoleine.

On subjecting the sample he had obtained (which amounted to several ounces) to distillation with strong potass ley, he was surprised at the large amount of quinoleine produced, which proved the presence of a far larger proportion of quinine than could have been anticipated. This unexpected result induced him to subject quinoidine to a stricter examination; and in order to avoid being misled by accidental circumstances, he procured samples from various other sources.

These were partly in irregularly-shaped masses, and partly in square cakes of a darker or lighter brown colour, which, by the warmth of the hand, became soft and flexible, but were readily pulverizable in the cold. The operation of powdering it imparted to it an extraordinary degree of elasticity. They were all completely insoluble in cold water, but scantily soluble in hot water, imparting to the latter a very bitter taste. Some commercial specimens which M. Liebig has obtained since are soluble in cold water, arising from a considerable admixture of other substances; differing also, from the same cause, in many of the following properties:—

All the first samples dissolved in alcohol, in the proportion of one part to two of the menstruum; and from this alcoholic solution, water precipitated copious, yellowish-white, resinous flakes, which cohered into a mass like the original quinoidine. Dilute mineral acids, as well as most of the organic acids, dissolved them entirely, and by adding a sufficient amount of the substance, became completely neutralised. From these solutions in acids, ammonia and alkaline carbonates precipitated resinous flakes. On agitating the fluid containing these flakes and the flocculent precipitate with an equal volume of ether, the precipitate dissolved in the ether, *with the exception of a dark brown residue.* On evaporating the ether, a resinous mass was obtained, having all the properties of an organic alkaloid.

Its salts were precipitated by tannic acid. Chloride of platinum produced in its solution in hydrochloric acid a yellow precipitate. It also dissolved completely in a solution of sulphate of copper with the separation of oxide of copper. There is not any resinous body which possesses this peculiar property.

These observations show, in M. Liebig's opinion, that quinoidine is a true organic base.

On subjecting the purified substance to elementary analysis, the following were the results:—

1st.—From the quinoidine of Mayence, 0·490 grammes yielded 1·3204 grammes of carbonic acid, and 0·3495 grammes of water.

2nd.—From the quinoidine of Frankfort 0·618 grammes yielded 1·6575 grammes of carbonic acid, and 0·4250 grammes of water.

3rd.—From the quinoidine of Coblentz, 0·3475 grammes yielded 0·9475 grammes of carbonic acid, and 0·2375 grammes of water.

According to these analyses, this substance contains

	I.	II.	III.
Carbon ..	3·19 ...	73·14 ...	74·33
Hydrogen	7·69 ...	7·64 ...	7·57

* Carbon = 75, according to Prout and Dumas.

The determination of the nitrogen, by the method of Verrentrapp and Will, yielded the following results:—

0·515 afforded 0·289 of platinum
0·617 „ 0·401 „

And, consequently, the substance under examination contains, according to the first analysis, 8·07 of nitrogen; according to the second, 9·51 of nitrogen—the medium of the two analysis giving as its amount of nitrogen, 8·79.

Baron Liebig next gives the analyses of the chloride of platinum and the base from quinoidine (amorphous quinine).

I.—0·6663 grammes of the double salt yielded 0·1755 of platinum; 0·8700 grammes of the double salt yielded 1·349 carbonic acid, and 0·303 of water.

II.—0·881 grammes of double salt yielded 0·221 of platinum.

III.—1·0668 grammes of double salt yielded 0·2715 of platinum.

From these analyses, therefore, the following are the proportions of carbon, hydrogen, and platinum, which exist in 100 parts of the chloride of platinum, and the substance derived from quinoidine:—

	i.	ii.	iii.
Carbon	32·41		
Hydrogen	3·86		
Platinum	26·33	26·32	26·45

Now, if the proportion of carbon, hydrogen, and platinum, existing in the chloride of platinum and this base, derived from quinoidine, be compared with the amount of the same elements present in the corresponding chloride of platinum and quinine; and, further, the amount of carbon, hydrogen, and nitrogen, contained in the substance under examination, with the proportion of the same elements as they exist in quinine; it will be evident that the two substances have identically the same composition.

Quinine, according to the formula, $C^{20} H^{12} NO^2$ contains carbon, 74·33; hydrogen, 7·75; nitrogen, 8·62.

Chloride of platinum and quinine, according to the formula, $Cl\,H\,C^{20}\,H^{12}\,NO^2 + Cl\,Pt$, contain carbon, 32·38; hydrogen, 3·53; platinum, 26·83.

The inference from these experiments, then, is irresistible, the uncrystalline substance derived from quinoidine bears exactly the same relation to ordinary quinine that uncrystalline sugar (barley-sugar) bears to crystalline (sugar-candy). Both yield the same products of decomposition; both have the same atomic weight, and identically the same composition; they differ only in form—in one word, the one is crystalline, the other, *amorphous*.

Baron Liebig then proceeds to comment on the importance of this discovery in a commercial point of view, and to express his belief that amorphous quinine will be equally available with the sulphate in the treatment of disease. He concludes by remarking that, in a commercial point of view, it is certainly a matter of great importance that we should be able to judge by the mere external appearance of a remedy, of its purity; and consequently, how far we may rely upon its efficacy. This is thought to be the case with the crystalline sulphate of quinine, whilst the non-crystalline form of quinoidine has probably led to a disregard of the evidence for its usefulness, even more than the fact of its being, as usually sold, an admixture of various substances. But with respect to the mere amorphous form, when the quinine is separated from all its adhering impurities, it is in the same case with opium, castor, and many more of the most efficient remedies which we possess, particularly with the extracts of our pharmacopœias. It is necessary to be assured of their purity before we employ them, but their amorphous form does not prevent their use. In many of these cases, indeed, having no direct or ready way of testing them, we rely solely upon the honourable character of the merchant and dealer, but we have a completely satisfactory test for the purity of amorphous quinine. Few medicinal agents afford so ready a means of distinguishing, [illegible] detecting adulteration [illegible] the organic alkaloids, [illegible] [illegible] employed, it is as easy [illegible] [illegible] in purchasing crystalline sulphate of quinine as the amorphous.

Amorphous quinine is completely soluble in dilute sulphuric acid, and in alcohol; it is also completely soluble in a solution of sulphate of copper with separation of oxide of copper. And if its solution in a dilute acid yields, upon precipitation by means of ammonia, exactly the same amount of precipitate as the weight of the substance originally dissolved in the acid, there can be no doubt remaining as to the perfect purity of the sample under examination.

It only remains to observe, that no dependence should be placed upon the ordinary quinoidine of commerce. As has been already stated, some samples dissolve incompletely in water, forming a dark brown, muddy fluid; these have been probably produced by simply evaporating the mother-liquors of sulphate of quinine to dryness.

They are, therefore, uncertain mixtures of various substances with sulphate of amorphous quinine, with or without excess of acid, so that in purchasing such specimens, the buyer is paying the price of an organic alkaloid for sulphuric acid, &c. The pure amorphous quinine should be separated, and it would then form a most valuable remedial agent; but the prescriber must be assured of its purity.

GOSSIP OF THE WEEK.

Royal College of Surgeons.—The following Gentlemen were admitted Members of this College, on Friday the 22nd inst.:—Messrs. R. S. Sale, T. Brown, J. Wright, W. Deeble, S. Gibbons, A. C. Gosson, G. King, A. J. J. Chatty, J. G. Bulley, T. Devlin, and J. Dwyer.

Apothecaries' Hall.—Gentlemen admitted Licentiates on the 21st of May, 1846:—Robert Smith Jeffs, Robert Nichol, Peter Thomas Gunning, Frederick Collins, John Gathergood.

War-Office, May 22.—2nd Dragoon Guards: Staff Surg. of the Second Class Alexander George Home, M.D., to be Surg., vice William Steele, who retires on half-pay. 9th Foot: Assist. Surg. Charles Frederick Stephenson, M.D., from the 39th Foot, to be Assist. Surg., vice Gahan, died of his wounds. 77th Foot: Michael Fenton Manifold, gent., to be Assist. Surg., vice Prendergast, promoted on the Staff. Hospital Staff: Assist. Surg. Joseph Samuel Prendergast, M.D., from the 77th Foot, to be Staff Surg. of Second Class, vice Home, appointed to the 2nd Dragoon Guards. Richard Spen. Pole, gent., to be Assist. Surg. to the Forces, vice Baillie.

Appointments.—Surgeon W. Mayne, M.D., to the Grampus. Assistant-surgeons S. Starratt, to the Caledonia; G. E. Nicholls, to the Victory. Her Majesty has also been pleased to appoint John Stephen Hampton, Esq., Surgeon in the Navy, to be Comptroller-General of Convicts for the Island of Van Diemen's Land. Royal Wiltshire Regiment of Militia: William Tucker, Esq., M.D., to be surgeon, vice Maule, deceased.

Disease is so rife among the French troops in Africa, that one battalion alone has been reduced after a few months' marching to 10) men, its number at first being 500, and others have lost more than half their quota, and this too without having been once under fire. More soldiers perish by disease than by the ball or yataghan of the Arab. The principal diseases are diarrhœa, dysentery, malignant fever of every type, and liver affections.

Cæsarean Operation.—Dr. Balfour, of Vienna, in the *Northern Journal of Medicine*, states that about a fortnight ago, a Cæsarean operation was performed there by the professor of midwifery. The woman died twenty-four hours afterwards. The child is still alive. On examination, no trace of inflammation, nor even attempt at union of the wound, was found. The woman seemed never to have recovered the effects of the shock and hemorrhage at the time of the operation. Her bones were in an advanced stage of mollities ossium, yet there was considerable deposition of osteophyte within the pelvis. Her age was twenty-seven, and it was her first child. The symphysis pubis was quite moveable, and the bones so soft that they could be separated, and the outlet [illegible] [illegible] by [illegible] the fingers after introducing them within it. Dr. Balfour adds, that the professor had stated, that though he had thought the child dead, [illegible] certainly would not have performed embryotomy! There can be no doubt that the operation was most unjustifiable.

Remonstration to Medical Witnesses.—The Earl of Clancarty has just presented a petition to the House of Lords, signed by the medical men practising in King's and Queen's Counties, and county of Tipperary, praying for adequate remuneration when summoned to attend as witnesses at assizes, quarter sessions, &c., and for the performance of all other public duties, for which they are at present very badly, or not at all remunerated.

Prosecution of M. Raspail for Practising Medicine without a Legal Qualification.—(Eighth Chamber of Correctional Police at Paris.)—It appears that M. Raspail has invented a system of hygienic and curative medication, of which camphor forms the basis, and in order to carry out his ideas effectually, commenced seeing and prescribing for patients under cover of the name of Dr. Cottereau, who was stated to be his partner, it being at the same time clearly made known that M. Raspail attended the consultations, and was the real prescriber. The Medical Association of Paris took up the matter, and on their complaint before the King's Solicitor, M. Raspail, as we stated last week, was summoned before M. Hallé to answer the charge of illegally practising medicine. The ground-work of the charge was that M. Raspail regularly attended the consultations, dictated the prescriptions to M. Cottereau, by whom they were written and signed, and that he questioned the patients, made the requisite examination, held consultations, gave advice, &c., and in fact acted like a physician in the practical sense of the word,* in the presence of a doctor of the Faculty of Medicine. The line of defence adopted was to the effect, that Dr. Cottereau was the real physician, and neither required nor received M. Raspail's assistance, that the latter rarely attended any consultation, and then only to derive information from Dr. Cottereau's proceedings. The evidence that was brought forward, however, tended to prove the charge, several witnesses declaring that they went solely to consult M. Raspail, that they were questioned and prescribed for by him alone. The case was consequently decided against him, and he was sentenced to pay a fine of fifteen francs.

* We presume this sentence, which is rather obscure, means that Raspail received the fees.—Printer's Devil.

MORTALITY TABLE,

For the week ending May 23, 1846.

Causes of Death	Totals	Average of 5 summers	Average of 5 years
All Causes . . .	860	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	120	162	188
Sporadic Diseases.— Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	91	98	101
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	162	155	157
Diseases of the Lungs, and of the other Organs of Respiration	252	271	294
Diseases of the Heart and Blood-vessels . . .	40	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	78	65	72
Diseases of the Kidneys, &c.	7	7	7
Childbirth, Diseases of the Uterus, &c.	10	9	10
Rheumatism, Diseases of the Bones, Joints, &c. .	12	6	7
Diseases of the Skin, Cellular Tissues, &c.	5	1	2
Old Age	39	60	67
Violence, Privation, Cold, and Intemperance .	42	25	

No. 319. SUMMARY JUNE 6

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

(From our own Correspondent.)

ACADEMY OF SCIENCES.

Meeting of 25th May, 1846, M. MATHIEU in the Chair.

NATURAL HISTORY OF FISHES.—M. Coste read to the Academy the results of his late researches on the natural history of a small fish called the "Stickleback" (Epinoche). Having closely watched a large number of these fishes, which he had placed in circular ponds of six feet in diameter, during the spawning season, he saw the male fish erect, with considerable care, a perfect nest, wherein the female afterwards deposits her eggs; these are afterwards protected against the voracity of the unnatural mother by the male stickle-back. The loves of these fishes are described by M. Coste in somewhat too brilliant colours, and we cannot but think the learned professor has been very much carried away by his imagination when he describes the female stickle-back issuing from the nest, *pale and colourless* from the natural agitation attendant upon her interesting circumstances. Notwithstanding these little blemishes, M. Coste's paper was listened to with much pleasure and attention.

COMPOSITION OF OPIUM.—M. Aubergier communicated a memoir tending to show the difference of the composition of opium, according to the nature of the plant and the care with which it has been cultivated. Thus, in the opium gathered in France and Algeria, so much as 22 per cent. of morphine can be detected; in that generally met with in trade, on the contrary, the quantity of morphine does not average more than 1 per cent.

MONSTROUS CONFORMATION.—A Portuguese child, aged four years, was presented to the meeting by M. Velpeau, presenting the following singular monstrosity:—1. A double set of male genital organs. 2. A third leg, containing the osseous elements of two extremities, attached to the posterior part of the body; this third leg is not completely under the control of volition. The child has been for some months past exhibited in London.

The remainder of the meeting was entirely taken up by an extremely personal debate between the perpetual secretary, M. Arago, and M. Libri, in consequence of a severe criticism inserted by the latter in the Journal des Débats, on the panegyric of Monge, read to the Academy by M. Arago at the annual meeting.

ACADEMY OF MEDICINE.

Meeting of May 26th, 1846; Dr. ROCHE in the Chair.

A report on the composition of some mineral springs being read by M. Henry, and adopted by the meeting, the adjourned debate on the plague and quarantine question was resumed.

THE PLAGUE AND QUARANTINE.

M. Rochoux said: "I now come to the practical bearings of my remarks. Lazarettoes, quarantines, disinfecting-houses, sanitary cordons, should be entirely suppressed. From the very statements brought forward by the commission, it follows as a necessary consequence that their existence can no longer be defended. Granting already one half of what I require, the report condemns the "cordon sanitaire," which the illustrious renovator of Epicurean philosophy, Gassendi, declares to have done so much injury in the murderous plague of Digne, his native city. As to quarantine to be performed on board, your commission rejects them, and ridicules with much reason the boasted distinction of goods in contagious, non-contagious, and suspected; the futility of the Fracastorian doctrine of contagion is further proved by the unanswerable fact that, since the year 1721, not one single case of plague has been observed amongst the men employed at the lading and unlading of the ships in Marseilles. The purge-houses of Marseilles are, therefore, not more to be thanked for the immunity enjoyed by that city from the plague, than the astronomers of the observatory for having saved the globe from destruction by preventing the fall of the moon. It is to the adoption of our French sanitary measures in Turkey that the commission attribute erroneously the fact that no plague has broken out in the sultan's dominions for the last ten years. I have it on the authority of Bulard himself, who was intrusted with the care of organising these measures in Turkey, that they have never been properly enforced, nor, indeed, could he even make his subordinates understand the necessity for precaution. This will be the more readily believed when it is recollected that M. Pariset himself, a violent contagionist, on his return from the Levant, never caused his note-books or papers to be disinfected, and conducted himself in this respect altogether like a Turk. (Laughter.) The commission is, however, quite correct in demanding the immediate evacuation of all places attacked with the plague, and the necessary dispersion of the patients has been long since proclaimed, even in an old distich to the following effect: that to be preserved from the plague it is indispensable to leave soon—(the infected spot)—to travel far away from it, and to return as late as possible:—

'Hæc tria tabificam tollunt adverbia pestem,
Mox, longè, tardè, cede, recede, redi.'

"The plague is positively contagious; but contagiousness does not authorise us to have recourse to extreme measures, such as lazarettoes or quarantines. It is first of all necessary to know what is the extent to which contagion exists. Thus, the insurance companies, who understand perfectly well their own interests, increase the premium of insurance according to the degree of danger to which the insured party is exposed. In doing so they act wisely. Why does not the commission follow their prudent example, and establish also several degrees of danger instead of at once proposing extreme measures? Besides, other arguments may be reasonably put forth against lazarettoes. It is acknowledged by all, that the best means of preventing the progress of typhus or plague is to disperse the patients, and, therefore, that the concentration of pestilential subjects in pest-houses, and lazarettoes must prove the infallible means of propagating the disorders against which they are specially directed. It is true this is not the first time that men have turned their backs upon the object it was their desire to attain: thus the custom of ringing the bells for the purpose of averting thunder—an absurd habit still in vigour in many places—is one of the best methods of attracting the evil. In Marseilles it is considered proper to block up the doors of the houses where pestilential patients have died, and yet this is the surest way of preserving the poisonous effluvia. Mead, although a contagionist, would undoubtedly not have countenanced this absurd precept, for, after proposing quarantines, he says, that if the disease be propagated, the dispersion of the patients in the country is the best plan to adopt. Now, if this method be sufficient to arrest the further progress of the plague at its height, who can doubt but that it will also be the most efficient against the outbreak of the scourge? If, further, it be admitted with the commission that the incubation of the plague lasts only eight days, what possible objection can there be to admit to free communication ships which have been eight or ten days at sea, and have not during that period had any patients on board? This is the plan adopted in England not only for ten years, as it is said, but since 1824; i.e., for a period of twenty-two years, as I have shown on a former occasion. When it is now a matter of notoriety, that consuls, ambassadors, &c., return from the East to France through England, in order to be present at balls, &c., at the Tuileries, and thus escape ten or fifteen days' delay in quarantine at Marseilles, would it not be the greatest possible nonsense to continue to keep the back-door locked and bolted when the front gate is at the same time thrown broadly open to all comers? Is there, we will ask, any excuse for the injury thus inflicted on our commercial interests? The misfortunes of the city of Marseilles in 1721 can no longer be reproduced, thanks to the progress of the science of public hygiene. As to Egypt, I do not think by any means that it is impossible to improve its sanitary condition; but the pacha seems obliged to keep up a military force, which is a heavy drain on the vital powers of the country, the population of which is speedily decreasing. Perhaps Mehemet Ali is not even aware of the miserable condition of the lower classes; under such circumstances France is fully justified in exerting all her influence for the improvement of Egypt, and if once the plague could be banished from that empire, the most headstrong Fracastorians would willingly abandon precautions without any further object, and already condemned in the opinions of most men. Influenced by the above considerations, I object to the report on account of the very contestable doctrines it contains; as it is, I only vote against the conclusions of the commission because they appear to me in contradiction with the facts which ought to support them; and, finally, I should be disposed to second any amendments approaching nearer to what, to my mind, should have been proposed by your commission."

M. Castel read a long speech on the subject; the weak voice of the orator, and the general inattention rendered it perfectly inaudible.

The discussion was adjourned to the next meeting, and the Academy separated at five, p.m.

Mr. Startin's excellent lectures on cutaneous diseases are too complete and too practical an exposition of the subject to permit us to forward in their full extent M. Cazenave's views on the same class of maladies: we think, however, the readers of the *Medical Times* may find some interest in the following general remarks, with which the learned professor of the Hospital Saint Louis opened his clinical course.

HOSPITAL SAINT LOUIS.

Clinical Lecture on Classification of Diseases of the Skin, by M. Cazenave.

The graphic description of diseases of the skin is now, thanks to the efforts of our predecessors, completed. They have taught us to distinguish lichen from eczema, impetigo from psoriasis; but the task of the pathologist is not, therefore, achieved; far from being so, the knowledge acquired furnishes us only with the elements of a new science as yet unborn. The diseases of the skin have been isolated and characterised; their diagnosis has acquired a considerable degree of perfection; analysis has borne all its fruits; the labours of the learned should now tend to condense the scattered elements by philosophical synthesis, to establish more general notions, and to bring this hitherto special subject within the scope of general pathology. It is no longer sufficient to detect the vesicular or pustular nature of an eruption; to discuss the propriety of certain denominations; to subdivide, to describe new varietes: the practical appreciation of forms is henceforward placed beyond the reach of controversy. What we have now to seek for is the connecting link between cutaneous affections and the laws of physiology. The unprofitable study of pimples and rashes to be cured or not with ointment or powder, must now be laid aside. Let us endeavour to ascertain if diseases of the skin are not the external expression of functional disorder; if they are not really produced by internal maladies curable by the common resources of rational therapeutics; in a word, if they are not the shadow, and internal derangement the real substance, against which the efforts of art should be directed. We are now able to cope with the difficulties of such an enterprise: rich on the one hand with the discoveries of those who have gone before us, and powerfully assisted on the other by the daily progress of anatomical knowledge. The researches of Cruikshank, Blainville, Weber, Breschet, show that the skin is a fibro-cellular texture, containing numerous and very important organs: the papillæ, the sudoriparous glands, the instruments of lymphatic and mucous secretion, and the structures by which colouring matter is produced. Here is a reunion of various elements which may be separately diseased, and permit us to discern the links between local disorder of the skin and general derangement of the system. Doubtless, anatomy should not be taken as a sole guide; but if acquired knowledge be combined with pathological observation, if a comparison between the physiological actions of the skin and its morbid manifestations be carefully drawn, unexpected and satisfactory conclusions must necessarily follow: thus lichen and prurigo, chiefly characterised by itching and pain, betray a nervous disorder; and the papule, their elementary lesion, must be considered as the morbidly developed papilla; the primary affection is a lesion of the nervous system; the papula is a secondary alteration. The same observations apply to impetigo, so manifestly a disease of the lymphatic apparatus; and to eczema connected with morbid change in the sudoriparous gands.

We divide cutaneous affections into eight classes. In the first we place all the inflammations of the skin, which we subdivide into four genera.—(*a.*) non-specific eruptions, which may be either acute or chronic—erythema, erysipelas, urticaria, strophulus, herpes, eczema, pemphigus, impetigo, ecthyma, sycosis; (*b*) non-specific and chronic eruptions—rupia, lepra, psoriasis, pityriasis, pellagra; (*c*) specific acute eruptions — roseola, measles, scarlatina, variola, vaccinia, chicken-pox, miliaris; (*d*) chronic specific eruptions—all belonging to syphilis.

The second class brings under one head all lesions of secretion, and is subdivided into three sections:—(*a*) follicular secretions — acne and porrigo favosa; (*b.*) epidermic secretions—icthyosis and horny productions; (*c.*) chromatic secretions—albinism, ephelidæ, and nævi pigmentarii.

The third class contains hypertrophic affections—elephantiasis (of the Arabs), molluscum, frambresia, and vascular nævi.

The fourth refers to degenerations with a tendency to destruction—elephantiasis græcorum, the pustule of Aleppo, keloide, lupus, and cancer.

The fifth comprises hemorrhagic maladies, such as purpura and melanosis.

In the sixth are placed the lesions of the nervous system—lichen, prurigo consequent upon hyperesthesia, and anesthesia.

To the seventh belong parasitic affections—acarus, pediculus, pulex.

In the eighth and last are described diseases of the appendages—alopecia, canities, plica, and onyxis.

The causes of cutaneous disease may be referred to three heads, accidental, sympathetic, and special organic causes. Amongst the first we may mention heat, cold, the contact of clothing, of sebaceous matter—of purulent secretions. Disorders produced by such causes must be extremely unimportant, and in many cases cease when their cause is removed. The second order of causes is constituted by all internal influences, and the functional internal disorder here betrays itself on the skin by more or less severe manifestations; but it is not always easy to appreciate such causes, or to detect them. Acne is almost always brought on in women by uterine derangement, and all treatment locally directed against the eruption will ultimately prove unavailing unless the condition of the womb be amended. The same may be said of eczema, generally connected with disorder of the digestive organs; of prurigo, due to the influence of a morbid state of the nervous system; of impetigo, chiefly developed in lymphatic subjects, &c. As to the expression, a special organic cause, we must thereby designate a sort of abnormal constitution of the skin, by which are developed those singular diseases which last for years without materially injuring the general health of the subject, such as psoriasis and lepra vulgaris. To these considerations of the general causes must also be added the influence of age, sex, season, climate, contagion, &c.

The prognosis of cutaneous affections is, generally speaking, not very serious. With the exception of eruptive fevers occasionally, and of pemphigus and elephantiasis græcorum, the life of the patient is seldom in any danger, but in many cutaneous diseases the deformities they produce must be taken into account, and must modify considerably the prognosis.

Should diseases of the skin be cured if possible in all cases? In a general manner M. Cazenave answers this question in the affirmative, although certain instances do occur in which an eruption should not by any means be treated; thus, an eczema which has replaced asthmatic attacks should be treated with much reserve. As to the treatment in general of disease of the skin, it is a subject of too important a nature, and comprising too many details, to be hurried over at the close of this lecture. Suffice it to say that a reference to the causes, such as we have described them, will in most instances lead to a rational method of therapeutic action.

HOTEL DIEU.

Clinical Lecture on Intestinal Obstructions. By Professor Chomel.

(Concluded from page 170.)

We have stated that the symptoms of intestinal obstruction are not by any means identical with those of peritonitis; thus, a meteoric distension is not uncommon in the latter disease; but it is seldom carried to any great extent, except when the muscular wall of the abdomen has been weakened by pregnancy, or other causes of chronic enlargement of the belly. The creeping motion of the intestines, perceptible through the integuments, may, indeed, by itself, be considered as almost a pathognomonic sign of obstruction, and forbids, at all events, the supposition of peritoneal inflammation. In old writers we find a disease described under the name of "nervous ileus," a form of derangement supposed to arise from spontaneous antiperistaltic motion of the digestive tube, by which the progress of its contents is interfered with, the alimentary bolus being forcibly brought back into the stomach. This opinion was at one time so prevalent, that it was asserted that suppositories placed in the rectum had been returned by vomiting. I need not say that the possibility of such an occurrence cannot be admitted, and that the statement can only have had its source in imperfect clinical observation. In the consideration of a subject so difficult as the present one, no gratuitous assumption should be entertained, and we must accordingly set aside "nervous ileus," which, in all probability, was only an imaginary disorder. Some cases of abdominal disease are accompanied with symptoms which unpractised observers might be tempted to refer to obstruction, such as a violent well-circumscribed pain suddenly appeared in a limited region of the belly, sickness, nausea, and obstinate vomiting, speedily followed by febrile excitement. These symptoms must, in most cases, be attributed to intestinal perforation rather than to obstruction, and it is important to be aware of the diagnostic differences between these two diseases, which proceed from different causes, and which are not to be treated in the same manner. Perforation is more frequently observed in the advanced stage of typhus, and is extremely rare in puerperal fever, even in lying-in hospitals; although Professor Chaussier has collected several cases of this kind after accouchment. The only cases in which doubt may for a short time be reasonably entertained, are those of perforation of the appendix vermiformis, which occur during perfect health, from the presence of a foreign body, such as a fruit-stone in its cavity; but the speedy appearance of peritonitis soon removes all doubt as to the nature of the disorder in most cases; although, in some instances, the progress of the symptoms is sufficiently slow to prolong uncertainty in the diagnosis, and to prevent the adoption of efficient measures. In order to be on the safe side, it will then be proper to conduct the treatment on the supposition of a perforation, and to exhibit the medicine which has hitherto proved most useful, i.e., large doses of opium. The *prognosis* of occlusion is always extremely serious, and, if the obstacle be not overcome, a fatal termination must be anticipated. It is true it is not absolutely impossible that the invaginated intestine may become spontaneously liberated; but this hope can scarcely be entertained, when the digestive tube is twisted on its axis, or when a portion of it is incarcerated under a convolution fixed by adhesions.

Treatment.—In the management of intestinal occlusions, two indications should be attended to. Peritoneal inflammation must be abated by antiphlogistic measures, such as venesection, local depletion, mercurial frictions, &c.; but the chief object of the practitioner must be to overcome the obstacle to the progress of the contents of the digestive canal. For this purpose, it is important to ascertain, if possible, whether the case be one of strangulation or of invagination. The latter is almost always referrible to intussusception of the ilium into the colon, and the right iliac fossa should, therefore, be carefully examined, in order to discover if it is the seat of any unusual pain, tumefaction, or dulness on percussion. If strangulation be suspected on sufficient grounds, purgatives should be exhibited to stimulate the digestive tube to contraction, by which means the imprisoned convolution may be liberated. The local application of ice on the abdomen, as in hernia; the injection of iced enemata will also be found frequently beneficial. The ascending douche injected into the rectum is one of the most efficient methods which can possibly be directed against intussusception of the ilium into the colon. Twice we have obtained, by its agency, the most satisfactory results; but a happy termination cannot be expected when the invaginated gut has become connected by inflammatory adhesions with the receiving intestine. We conceive, as a last resource, and when the obstruc

tion is demonstrated to exist in the colon that M. Amussat's operation of lumbar enterotomy affords chances of relief, which should not be cast away.

DAN. M'CARTHY, D.M.P.

England.

[The following are the only articles of interest to the profession in the last three numbers of the *London Medical Gazette.*]

PLACENTA PREVIA.—Mr. Stickings describes a case of placenta presentation attended with considerable hemorrhage, in treating which he extracted the placenta prior to the birth of the child, the hemorrhage immediately ceasing. The head presented naturally; the uterus acted with vigour, and a living male child was expelled. At the date of the report the patient was doing well.

THE FUNCTIONS OF THE NERVES OF THE ORBIT.—A very elaborate essay by M. Valentin, on the functions of the nerves of the orbit, has appeared in consecutive papers, of which the following are the principal conclusions:—1. The iris is endowed with two sets of nerves, which are of cerebral and spinal origin, respectively; the filaments of the former being derived from the motor oculi nerve, and those of the latter from the cervico-spinal nerves. 2. The cerebral fibres, passing through the inferior division of the motor oculi, enter the ciliary ganglion by its short root. The spinal fibres arising from the cervico-spinal nerves traverse, in the dog and horse, a portion of the vagus and sympathetic in the neck, and then enter the superior cervical ganglion of the latter; while in rabbits, and in man, they scarcely touch the simple cords of those nerves; but on emerging from the superior cervical nerves enter, some the ganglion of the vagus, and some the superior cervical ganglion of the sympathetic. They all, however, proceed by means of the carotid plexus; and having passed on, through the ophthalmic division of the trigeminal, reach the ciliary ganglion by its long root. 3. As the motor oculi and the cervico-spinal nerves are of mixed nature, it is reasonable to suppose that both sets of the iridal nerves contain fibres of sensation as well as fibres of motion; though it is evident that the latter fibres alone admit of demonstration, the others can only be inferred. Be this as it may, the hypothesis hitherto received, that the motor nerves of the iris reach the membrane by means of the short root of the ciliary ganglion, and those of sensation through the long one, is incorrect; as the filaments (of whatever kind) having a cerebral origin, penetrate the former root of the ganglion, and those of spinal origin the latter. 4. The muscular actions of the iris depending on the power of its cerebral nervous supply are opposed to those excited by its spinal nerves. Upon irritation of the motor fibres of the third nerve, the pupil diminishes to a very small circular area; when they are paralysed it becomes widely dilated; for not only are the muscular fasciculi commanded by them passive, but by the operation of the spinal nervous current, which continues unaffected, other fasciculi greatly enlarge the pupil. Hence, the dilatation of pupil is not merely to the extent it would attain, if all the muscular fibres of the iris were paralysed during life, or by death; but it is greater, in proportion to the activity of the fibres which dilate the pupil, and are supplied from the spinal nerves. Again, upon irritation of the spinal nerves of the iris, the pupil is somewhat enlarged; but upon their division, the cerebro-iridal nerves being no longer antagonized, the pupil becomes extremely contracted. The iris, therefore—as careful examination of it most clearly confirms—is not a simple muscle, but an aggregation of muscular fibres of two systems, which respectively diminish and enlarge—or, in other words, are contractors and extensors of the pupil. 6. The medium size of the pupil is inconsistent with disproportionate action of either the extensor or contractor fibres: when both are paralytic, the size of the pupil is determined merely by the bulk of the iris. 7. When the contractor fibres altogether overcome the extensors, the pupil is exceedingly diminished; but when the latter are actively exerted, the pupil is expanded beyond the medium state. Thus, if strong light fall upon the eye, or both eyes are turned inwards, or inwards and upwards, or objects in close proximity are looked at, the contractor fibres become especially active; and, on the other hand, the extensor fibres come into play in the dark, or when the upper lid is raised, or distant objects are regarded. The former of these actions are more or less involuntary, and effected by the inferior division of the motor oculi; the latter, comparatively voluntary and governed by the superior division of the same nerve, the pathetic and abducens; the contractors, therefore, of the pupil act in concert with the involuntary motions, regulated by the inferior division, while the extensors are in relation with the voluntary actions of the superior division of the motor oculi, the pathetic and abducens. The nerves of the contractors of the pupil are contained in the cerebral; those of the extensors in the spinal division of the iridal nerves. 8. In rabbits when the contractor fibres are paralysed, the pupil is enlarged; when the extensors are so affected it is somewhat diminished, and made elliptic in the longitudinal direction. 9. There is also in rabbits an antagonism between individual filaments of the spino-iridal set of nerves supplying the extensors of the pupil. If the entire ganglion of the vagus and the branches entering the posterior and external border are divided, the superior margin of the longitudinally oblong pupil becomes pointed, and the inferior rounded, but if the superior cervical ganglion of the sympathetic be wounded, the inferior margin becomes pointed, while the superior is rounded. This experiment may be pushed even farther still. When excision of the ganglion of the vagus has been performed, although the pupil always obtains an oblong form, and is diminished in size, yet we often find its superior angle less acute, and not unfrequently inclined obliquely, especially backwards; but when the superior ganglion of the sympathetic or the soft nerves are divided, the inferior acumination of pupil is never absent, and very often the aperture presents the rounded and acuminate form combined. finally, if both the ganglion of the vagus and that of the sympathetic with the soft nerves be cut away, the shape of the pupil becomes oblong, obliquely from the superior external to the inferior and internal part. When the several experiments are compared together, it appears that the filaments coming from the ganglion of the sympathetic supply the muscular fibres of the iris at the inferior portion of the pupil; and those proceeding from the ganglion of the vagus, the fibres nearest its superior boundary: so that, by a mere operation successfully executed, the figure of the pupil is made oblong in the perpendicular direction. The more, however, we proceed upwards in operating upon the cervical ganglion of the sympathetic, the more does the effect upon the iris and pupil also become developed from below upwards and backwards; while the further we descend in the ganglion of the vagus, so much more is the effect from above, downwards and forwards. It is from this easily intelligible why the pupil becomes obliquely oblong (as it is not unfrequently observed in the human subject), when both these parts, together with their immediate branches, are cut away. 10. In proportion as the spinal nervous supply is destroyed, the cerebral becomes more influential; as the flexors, in other cases, produce a contraction of a limb, when the extensors are paralytic or divided; and as, when the extensors are enfeebled, the contraction of the flexors, though already great, admits of increase upon strong irritation of the nerves, so is it with the iris. 11. As the flexors occupy for the most part one surface of the extremities, and the extensors another, yet on one and the same surface notwithstanding, both flexors and extensors exist; so, in the iris, though the circular fibres surrounding the pupillary margin comprise the great majority of those which contract the pupil, and its extensor fibres are chiefly situated at the periphery, yet neither set of muscular fasciculi appears strictly circumscribed within these limits. 12. The antagonism of the contractors and dilators is remarkably exemplified in artificial pupils. Thus, if a longitudinal fissure is made almost in the centre of the iris of a healthy rabbit, when both sets of fibres are acting, the wound becomes diminished in length, and circular; while, if the same operation is performed on a rabbit, of which the spino-iridal nervous supply is destroyed, the artificial pupil presents a persistent longitudinal fissure, more or less parallel to the pupillary margin. 13. Upon evacuation of the aqueous humour the pupil of a healthy rabbit becomes notably contracted; whereas in one, of which the spino-iridal nerves are divided, it expands under the same operation. 14. When the spinal source of supply is cut off, the pupil becomes contracted, and continues so, unaltered by the light If, however, some time have elapsed, it occasionally happens in rabbits that the pupil enlarges when the strong light of a candle falls upon the eye, and contracts in the dark. These phenomena are explicable in the following manner:—In a sound eye, upon the impression of light, or evacuation of the aqueous humour, the cerebro-iridal overcome the spino-iridal nerves, and diminution of pupil results. An extreme of this condition also ensues, and is persistent, owing to the unopposed action of the contractor, when the latter nerves are divided, and the former alone remain efficient. Now, as the light is a moderate stimulus, it still produces its ordinary effect, provided the contraction has not reached its utmost limit; this is now and then the case with rabbits, especially when a few weeks have elapsed after the operation. If, however, it has already reached its highest degree, and an irritation sufficient to overcome the power of the cerebro-iridal nerves is applied, the contraction, being incapable of increase, is actually lessened—as stronger irritation still would of necessity cause paralysis; in like manner, a certain given force of electricity, which produces convulsion of healthy muscle, renders one in excessive or continual contraction paralytic. This peculiar dilatation of pupil upon the influx of light, is more rare in rabbits than in dogs; because the spino-iridal nervous supply is less energetic, and consequently less readily exhausted, in the former. 15. After section of the trigeminal nerve, the pupil becomes much contracted in rabbits, but in dogs and cats is enlarged—a difference according with the diversity in the cerebro-iridal and spino-iridal nerves of dogs and rabbits. For in dogs, where the cerebro-iridal nervous action is greatest, the excessive irritation produced by division of the fifth induces paralysis of the contractor, and consequently dilatation; in rabbits, where the excitability is less, the same irritation causes only extreme contraction of the muscle. 16. The alterations of pupil after death seem to depend on the antagonistic contractility of the iris; for, during cadaveric rigidity, according as the contractors or extensors are the more in action, the pupil becomes either exceedingly large or small, and continues the same throughout. When, however, rigidity has entirely disappeared, the pupil assumes a degree of expansion corresponding to the bulk of the iris. 17. Lastly, the antagonism of the cerebro-iridal and spino-iridal nerves is borne out by the history of their evolution. The motor oculi at first represents an anterior motor root, and receives its fibres of sensation subsequently; the ophthalmic division of the fifth, on the contrary, is at first purely sensitive, and receives the motor spino-iridal fibres afterwards. The motor fibres, therefore, of the cerebro-iridal set, and the sentient fibres of the spino-iridal, are the first developed; and the sentient filaments of the former set, and the motor filaments of the latter, are secondary. Valentin concludes that man in this particular resembles the rabbit, which has the cervical vagus and sympathetic distinct, rather than the dog, in which the same nerves are united.

FOLLICULAR DISEASE OF THE VULVA.—Dr. Oldham describes a form of inflammation, affecting the follicles, which are freely scattered over the mucous membrane of the vulva. Like most of the affections of the external organs, it is a very painful disease, and very difficult to cure. It is not peculiar to married women, nor is it confined to one period of life. In five cases the origin of the disease was referred to the cessation of the menses, and in one to marriage; in the majority of cases, however, no cause could be assigned. It has been mistaken for leucorrhœa. The disease is very generally limited to two symmetrical spots of mucous membrane at the posterior half of the entrance of the vagina within the nymphæ, and a detached portion just beneath the urethra. If an examination is made at an early period of the dis-

case, a number of small, circular, highly injected points are seen, and the mucous membrane looks much inflamed. At first these points are solitary, and slightly raised on the surface, and a minute speck of ulceration is frequently seen in their centre. These correspond to the follicular crypts of the mucous membrane, and the ulcerated portion to their central pore. After a time the points lose the appearance of being isolated, they coalesce, and a band of vividly injected membrane is formed. The sphincter vaginæ is always contracted, and the mucous membrane is much punctured, and in several cases Dr. Oldham has seen the disease extend to the lowest folds of the vagina; the tops of which become very red, and bleed on being touched or separated. In one case the whole tract of the mucous membrane of the vagina was similarly affected. When the disease has been of long standing, a change may be observed in the colour of the mucous membrane of the vulva, and the lowest part of the vagina It assumes a white appearance, as though some white paint had been diffused over its surface This occurs particularly in women who have ceased to menstruate, and is not confined to the present disease, as it has been found well-marked in protracted cases of prurigo of the vulva. The disease in question is most intractable; it has all the inveteracy of some of the more chronic skin diseases, and will torment a person for years, sometimes getting better, and again returning as bad as before. The earliest symptoms of this follicular disease are leucorrhœa, with more or less irritation of the external genitals. These are particularly noticed after walking or standing The leucorrhœal discharge then greatly increases, and from being thin and whitish becomes yellow and thicker. It never assumes the viscid gluey character which marks the affections of the cervix of the womb, but it soils the linen with a yellowish tinge, sometimes having a darker colour, from being mixed with a small quantity of blood, and occasionally smelling badly. That part of the mucous membrane which is affected becomes the seat of a most painful and almost incessant smarting, with every now and then a severe attack of pruritus. The itching, however, is not a uniform symptom, as some of the worst cases are unattended by it, and the sore and sensitive state of the vulva forbids any attempt at rubbing it. The patient sits down with pain, and adjusts her seat with care, first resting on one ischium, and then gradually sinking down on the chair. Sexual intercourse is painful from the first, but when the disease is established it is altogether abandoned, from the intense suffering it causes. Pain in passing water is a very rare symptom. Sometimes the little patch of inflamed membrane beneath the urethra may be touched by the urine as it flows, which occasions much pain at the time, but generally it escapes the stream of urine. The local symptoms are often aggravated just before a menstrual period, and particularly by any mental depression, or unusual fatigue, in warm and wet weather, and by a constipated state of the bowels. In this as in most of the affections of the external organs of the female, much unhappiness is apt to spring up between the husband and wife, which embitters the life of the woman, and greatly augments her sufferings. To the foregoing symptoms are now added habitual lumbar and sacral pains, heavy pains in the thighs and inguinal canals, with sometimes forcing pains when walking The general health becomes impaired, the patient is timid, foreboding, and fretful the digestive organs suffer; the appetite fails; the tongue is pale, flabby, and tremulous, and she is constantly nervous, hysterical, and weak. When the parts are separated in making an examination there is always much pain, the inflamed follicles, when even gently put on the stretch, sometimes bleeding a little. The orifice of the vagina is always closely contracted, and so shuts up the canal that the leucorrhœal discharge accumulates within it, and when it does escape, flows profusely. The vagina and uterus are neither tender nor hot, and when once the finger passes the closed sphincter, there is but little pain experienced in exploring these parts. A quantity of discharge usually follows when the finger is withdrawn These are the prominent features of this disorder, and there is but little difficulty in recognising it if the parts are examined. The great practical error is to look upon the disease as an acute leucorrhœa, and the local pain, &c., as caused by the acrimony of the discharge. This disease differs from the diffused inflammation of the vulva in adults, by its attacking only a limited portion of the mucous membrane of the vulva, in not being attended with general swelling, and in its obvious follicular origin. It differs from eczema, or herpes, or the aphthous state of the vulva, not only on these points, but in the absence of vesicles; and it differs from them all in its intractibility. With respect to the treatment, Dr Oldham seems to give little hope; palliatives, such as sedatives, only can be expected to be of service, and of these the most generally successful is hydrocyanic acid. It may be used either as a lotion or as an ointment; the latter is preferable. Dr. Oldham usually employs two drachms of hydrocyanic acid with a scruple of the diacetate of lead, made into an ointment with two ounces of cocoa-nut oil. The parts should be first bathed with some simple infusion of roses, and the ointment applied two or three times in the day on lint It rarely fails to give much relief. Amongst the preparations of opium, a lotion of lime water with opium is perhaps the best. The poppy lip-bath has sometimes been very grateful to patients, and quieted irritation. A very useful application is to saturate some bread with a decoction of conium leaves, and to add two drachms of the liq. plumb. diacet to a pint of the decoction. A poultice thus made ought to be kept constantly applied to the vulva, and it will frequently assuage the smarting. The general health must at the same time be attended to; the diet should be nutritious, but unstimulating, and the patient should avoid walking and sexual intercourse. Change of air is of service, as are also vegetable tonics combined with saline laxatives. This plan of treatment will always afford great relief. The discharge diminishes, the pain and smarting of the vulva are appeased, and the general health improves; but it does not do more than this. The diseased follicles are still there, and any neglect of the prescribed precautions, or the coming on of any exciting cause, soon excites inflammation, with the attendant distressing symptoms. It only mitigates, but does not cure When the health is recruited, however, by these means, Dr Oldham has in several instances prescribed a mild mercurial course. This has usually consisted of the liq. hydrarg, bichlorid ʒj ex. dec. sarsæ. c., ex sarsæ.; and while on the one hand he has never seen any injurious result from this mode of administering mercury, he has reason to be satisfied with its influence in checking, and sometimes eradicating, this complaint. It has, however, no specific power in curing the disease, for in three cases where he tried it, and at first thought it efficacious, the disease re-appeared. There is a resemblance between the follicular disease of the vulva and the small vascular growths at the mouth of the urethra, in their tendency to return when apparently destroyed. In the first disease, unless the mucous membrane whence they spring is cut off with the growth, it generally sprouts forth again; and in the more obstinate cases of the follicular disease, it might perhaps be a good expedient to dissect off the affected portion of membrane. The cicatrix which it would leave in women who have not passed the child-bearing season, would be an objection to it; but in those cases which occur after the catamenial decline, it might be advantageously adopted. Several cases illustrative of these remarks are related by Dr. Oldham.

Analysis of the Fluid of Spina Bifida.—Dr. Percy describes the analysis of the fluid obtained after death from a case of spina bifida. It measured six ounces; but a small quantity escaped on making the puncture. Colour, reddish brown; turbid; on standing, a small quantity of red particles subsided, and left the supernatant liquid transparent and of a pale yellow colour, like serum Hence, a little blood had probably been accidentally mixed with the liquid; but the quantity could only have been extremely small, and could not sensibly affect the correctness of the analysis. Odour precisely similar to that of fresh brain; specific gravity 1010°; temperature, 59° Fah. restored slowly, yet completely, the colour of reddened litmus paper. The results of the analysis for 1000 grains were.—

Solid residue	17·50
Water	982·50
Albumen	4·24
Indeterminate organic matter	1·41
Chlorine, carbonic and sulphuric acids, potass, soda	8·58
Phosphate of lime	0·21
	1000·00

The results of analysis in another specimen for 1000 grains were:—

Solid residue	9·1
Water	990·9
Organic matter	1·5
Fixed saline matter	7·6
	1000·0

Dissection of a Pseudencephalic Fœtus.—Dr Handfield Jones describes the appearances which presented themselves on the dissection of a pseudencephalic fœtus. It measured from the heel to the root of the nose about eight inches and three-quarters; its limbs were well formed; the neck quite deficient; the face, looking upward, appeared to rest on the trunk; some fine hair grew on the skin about the shoulders, and the nails were quite distinct. The cranium was deficient in all the parts above the orbit; in the place of its parietes there were the remains of a large sac, containing some reddish matter of a gelatinous consistence; the base of the cranium was formed of partly bony, partly cartilaginous structure, but it was unfortunately injured before its real character was recognised; there did not, however, appear to be any trace of the foramen magnum. The eye seemed to be natural in structure, and was provided with the usual muscles; the optic nerve passed inwards some way, and terminated, as far as could be ascertained, by a free extremity. No auditory nerve could be found, there were, however, labyrinthine cavities, and an apparently normal tympanum with the usual ossicula; the external ear and meatus were also present; no roots of the other cranial nerves could be discovered, except that of the inferior maxillary division of the fifth, which was found by tracing the gustatory nerve upwards, it is probable, however, that they existed, but had been injured in the previous dissection. The vertebral canal was seen to be widely open down to the lower part of the [dor]sal region; from it there projected a large sa[c] with fibrous parietes, very much resembling that observed in cases of spina bifida, this sac lay in a kind of foss[a] bounded by the flattened ribs on each side, [a]bove it was attached to the cricoid cartilage, below it seemed to blend with the skin, and to be attached to the posterior part of the iliac crest. On cutting into this sac, it was found to be divided into two compartments, the one on the left contained two bodies, a greater and a smaller, of deep red colour; their general appearance was exactly that of the spleen, and with this their minute structure was found by microscopic examination to agree. The right chamber of the sac was empty; it did not appear to have any external opening, but at its lower part, and continuous with it, was a small pouch in which a probe made its way into the intestine contained in the cavity of the abdomen; it did not, however, communicate with either of the chambers of the larger sac, the left one of which, from its connexions and general relations, Dr. Jones regards as representing the stomach. In the lower part of the trunk the vertebral canal appeared to cease rather abruptly; the ossa innominata had the usual conformation, but the pubic portions were widely separated, so that there was no symphysis; the sacrum was reduced to a single piece and a few cartilaginous nodules. The plexuses of lumbar and sacral nerves existed as usual, and were traced on one side through some masses of partly ossified cartilage into a groove on the inner side of the fossa containing the sac, where they presented a series of loosely hanging roots, on which some distinct ganglia were formed in the usual situation; the intercostal and lumbar nerves passed into the groove, and terminated also by free extremities. this groove was lined by a smooth membrane, having the aspect of dura mater, and was at once recognised as the lateral half of the divided vertebral canal. No appearance whatever of nervous centres could be

found. On examining the thorax, the heart and lungs were found in their usual position, and quite natural; the pulmonary artery and aorta arose as usual, but the latter organ divided shortly after its origin into a right and left trunk, which formed an arch on each side, and then descended, being separated widely apart, on the sides of the central cartilaginous masses, which probably represented the lateral halves of the bodies of the vertebræ; of these trunks the right was the larger; it gave off, near its origin, arteries to the head and upper extremity, afterwards several to the sac in the vertebral canal, and to the other viscera, and terminated below by dividing into two branches; the larger of these ran by the side of the bladder, and entered into the umbilical cord; the smaller passed down to the lower extremity as the external iliac. The left aorta descended on the opposite side of the trunk, gave off branches like the other, and terminated below by a large branch which became the external iliac of that side, and two or three smaller, which dipped into the pelvis, and appeared distributed to the parts contained in it; there was no umbilical artery on the left side. The external iliac veins were distinctly traced up some way, and received large renal veins, but they were not followed to the heart. Two brachio-cephalic trunks were formed by the veins of the head and upper extremities in the usual manner. The umbilical vein appeared to pass directly backwards in the longitudinal fissure of the liver, and not to branch out into any portal canals; but this was not quite satisfactorily determined. In the upper part of the thorax the trachea was seen descending from the cricoid cartilage; it was overlaid by two organs, one of which appeared to correspond to the thyroid body, the other to the thymus gland. the usual cartilages of the larynx were present, and the rima glottidis was quite distinct. it was overhung by a membranous epiglottis, in front of which was the tongue attached to the hyoid bone in the usual way; the cavity of the mouth was natural, the hard palate presented a deep groove in the median line, but did not open into the nasal fossæ; on each side were the grooves in which the sacs of the teeth are formed; these were most distinct at the anterior part; the nasal fossæ presented nothing remarkable, except that their septum was reduced to a mere vertical band posteriorly. The abdomen was separated from the thorax by a well developed diaphragm; immediately below this was placed the liver, which was large, but did not seem nearly so vascular as natural; it was divided irregularly into several lobes, two of which, of rather small size, projected backwards into the vertebral canal; no portal vein could be found entering the liver, but it received a large artery from the right aorta. it was provided with a gall-bladder, the duct of which soon became impervious, and terminated as a fibrous cord. Below the liver a cæcal pouch of small size was found, from which two diverticula proceeded: one led to the small sac in the vertebral canal, and opened into it; the other ran downwards, as a kind of intestinal tube, into the pelvis, but soon terminated in a cul de sac; there was no appearance of an external opening. On each side of the trunk the kidneys were found lying on well developed psoæ muscles; they had the lobulated aspect, and were of large size; the ureters descended to open by split-like orifices on the posterior wall of the bladder, the anterior wall of which was deficient, its margins, being continuous with the abdominal parietes, the urethra was a mere groove formed by two folds of skin, and lined by the mucous membrane of the bladder; no other trace of external organs existed. Two organs of a much smaller size than the kidneys, and of a flattened oval shape, were also found on the psoæ muscles; from each of these a distinct cord passed down to the internal abdominal ring. Dr. Jones supposes these to be rudimentary testes, as no trace of uterus or fallopian tube could be found. On the anterior and superior part of each kidney a large supra-renal capsule was situated. a section of this showed well the relation of the cortical to the medullary substance, the former forming merely a narrow yellow stripe round the latter, the proportion being, therefore, the converse of what is found in adult life. Lastly, close upon the sac contained in the vertebral canal, just where it was joined by the intestine, there was found an organ having much the appearance of a pancreas. The sympathetic nerve was not traced on the right side, but on the left it formed a large ganglion at the upper part of the thorax, from which a slender cord ran down on the side of the divided vertebral column; it presented two or three well-marked ganglia in the lumbar region, and gave off several distinct communicating branches to the intercostal and lumbar nerves.

Fatal Hemorrhage from the Gums.—Mr. Sterry narrates the case of a fine boy, twelve months old, who, with the exception of disordered bowels, had been perfectly healthy until nine months old, when, dentition commencing, he had convulsions, frequently as many as twenty in the day. The gums were scarified, and leeches applied to the head; no material bleeding ensued, and three incisors of the lower jaw made their appearance. About the middle of January last the child had dropsy, from which it recovered. January 31st, the gums having been directed to be lanced by a physician, the child was, contrary to his direction, taken to a chemist and druggist, who instead of lancing the upper incisor, which required relief, made a deep incision over the first molar tooth on the right side of the lower jaw. Hemorrhage ensued, continuing without intermission until the 3rd, when the actual cautery was applied, which arrested the bleeding for about an hour, but burst the upper lip, from which blood flowed for two days, when the child was brought to Mr. Sterry's surgery. The child being restless and suffering from teething, notwithstanding the hemorrhage, the upper gum was lanced, and bleeding prevented by the application of dilute nitric acid, and afterwards the tr. ferri sesquichloridi. The same remedies being applied to the lip and lower jaw, from which the hemorrhage proceeded, arrested it for a short time. The next day the bleeding still continued, except from the upper gum, which Mr. Sterry had himself lanced, the application of the tr. ferri sesquichloridi being neglected. The day following, blood which had been swallowed was both rejected from the stomach, and passed per anum, the child being much blanched and debilitated. The turpentine enema was used, and one grain of gallic acid given every two hours; the gallic acid was also applied externally, and arrested the hemorrhage for a short time; it however soon returned, and the child becoming convulsed, died the next day. No post-mortem examination was allowed. The mother stated, that on one occasion, during a fit, blood oozed from the inside of the thigh in sufficient quantity to cause a stain the size of a shilling.

Deafness.—Dr. Allnatt recommends the following in deafness arising from atony of the auditory nerves, accompanied by deficiency of cerumen. He says the ammonia produces gentle stimulation, and the ox-gall supplies the place of the natural secretion. A marked improvement speedily occurs in cases which are adapted to its employment. The ears must be first syringed with a solution of soap in warm water, and the liniment applied, morning and night, to the whole surface of the meatus auditorius by means of a camel's hair pencil. The effect will be augmented by lightly plugging the external orifice with wool.' Liniment for atonic deafness. R. Linimenti camphoræ comp., ℥j; Fellis bovini inspissati, ʒj. Misce. *** The remedy is not by any means novel.

Petrifaction of Organic Substances.—As a proof that we are not singular in our opinion of the comparative failure of Dr. Silvestri's ingenious method, we quote the observation of a most careful and most successful observer of nature—Mr. Waterton, author of many admirable essays on natural history. Mr. Waterton's remarks are as follows:—" I was invited to see, in Florence, a bird, a mouse, and a piece of heart and liver, which by a chemical process, only known to the inventor, had become as hard as stones. I had been given to understand that I should find the bird and mouse as perfect in their form as when alive; but, upon examination, the anatomy appeared shrunk and injured. the plumage of the bird and the fur of the mouse were wrong at all points, so that I left the room with disappointment in my looks."—*Waterton's Essays, second series, published by Loudon.*

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

BY G. J. GUTHRIE, F.R.S., &c.

LECTURE V.

Non-applicability of the Hunterian theory and operation in cases where the wounded artery cannot be seen, in consequence of the wound not being direct; Statistics of the operation for the ligature of the common iliac artery, Statistics of the operation for the ligature of the external iliac artery; Objections to the latter operation in cases of wounds of the femoral artery; case of diffused popliteal aneurism; Ligature of the femoral artery at the margin of the sartorius muscle; Secondary hemorrhage, Ligature of the femoral artery immediately below Poupart's ligament. Recurrence of hemorrhage from the seat of the first ligature; Ineffectual search for the bleeding vessel; Amputation; The artery ulcerated through; Secondary hemorrhage from the groin; Ligature of the external iliac artery; Recurrence of the hemorrhage; Ultimate cure by pressure; Remarks on the case, The theory that a ligature placed on such an artery as the femoral would fail, if in the immediate vicinity of a large branch, unfounded; The fear of fatal hemorrhage from the division of the external containing parts of a small spurious aneurism, unworthy comment, No operation should be performed on a wounded artery, until it bleeds through the external wound; Case of a wound of the femoral artery by a musket-ball; Apparent cure of the wound; Formation of a varicose aneurism; Ligature of the external iliac artery, and death from mortification, M. Delpech's case of wound of the femoral artery, with consecutive aneurism; Ligature of the external iliac artery, and death from mortification; Case of wound of the femoral artery [illegible] ball; Ligature of the external iliac artery; Death from typhoid fever; Mr. Liston's comments on this case; Dr. Buchanan's case of ligature of the femoral, inguinal, and external iliac arteries for secondary hemorrhage, consecutive on the separation of sloughs, Case of wound of the femoral artery; Occurrence of dry white gangrene; Secondary hemorrhage; Ineffectual ligature of the external iliac; Enlargement of the wound, and ligature of the lower end of the wounded vessel, with arrest of bleeding; Death from exhaustion; Remarks on the case, Should the line of demarcation in cases of mortification from wounded arteries be waited for, before amputation is performed? Place of election for the performance of amputation, Mr. Norman's case of wounded artery in the upper and outer part of the thigh; Secondary hemorrhage, Ineffectual search for the wounded artery; Ligature of the external iliac artery unavailing; Ligature of the femoral artery below Poupart's ligament, Arrest of the hemorrhage; Loss of the leg from mortification caused by the ligature of the external iliac; M. Lutens' case of ligature of the external iliac artery for a wound of the femoral, some lines below Poupart's ligament. Return of the hemorrhage; Ineffectual application of a second ligature on the external iliac higher up; Incision of the diffused aneurismal swelling, and ligature of the femoral below the profunda; Death from mortification; Case of wound of the femoral artery in the lower part of the upper third of the thigh; Formation of a large diffused aneurism; Ligature of the femoral artery below Poupart's ligament; Secondary hemorrhage; Ligature of the external iliac; M. Jobert's case of ligature of the femoral artery below Poupart's ligament, for a diffused aneurism of the same artery under the sartorius muscle, caused by a wound; Death from repeated hemorrhage; Dr. Portal's case of hemorrhage after an operation on the groin; Ligature of the external iliac: Return of the hemorrhage; Ligature of the femoral artery and vein at the site of the wound; Arrest of the hemorrhage, Death from peritonitis and gangrene; Dr. Murray's case of aneurism from a blow; Ligature of the femoral below Poupart's

igament; Violent secondary hemorrhage; Ligature of the external iliac; return of the hemorrhage from the lower part of the injured vessel; Cure by compression.

Two women who had borne a living child appeared before Solomon on the death of one of the children, each claiming the survivor as her own. The great lawgiver, unable to decide in the first instance which was really the mother of the living infant, desired that it should be divided by the executioner, and that half should be given to each of the claimants. To this the false parent acceded, but the real one, impelled by that affection which is so natural to a mother, gave up her right and her child rather than it should be sacrificed. Solomon, thus made aware of the real parentage of the infant, awarded the child to her who had shown herself so deeply interested in its welfare. I am in the position of the real mother with relation to the treatment of wounded arteries. It is now conceded, I believe, by all English surgeons that when an artery is seen bleeding in the bottom of a wound, that two ligatures ought to be placed upon it, one above, the other below the injured part. It is however attempted by some few to maintain a part of the Hunterian theory and practice, by affirming that when the artery cannot be seen in consequence of the wound not being direct, although it bleeds, or is supposed to be about to bleed, or to form a spurious diffused, traumatic aneurism, having an external opening, this theory and practice may be adopted in its treatment. Its advocates, beaten from their first claim of the whole of the theory, are now reduced to contend for half or even a part. I cannot however yield them one single point. I totally deny the justice of every part of their claim, and declare without hesitation that the operation of tying the external iliac artery for a wound of the femoral must in general be not only ineffectual, but often fatal; and that if a person should escape with life and limb, he only escapes by that sort of accident which every one acknowledges to have been most fortunate, when a man in a gale of wind is carried off the deck of his ship by one wave of the sea, and is thrown back by another—a consummation always to be desired in such cases, but rarely to be expected. One party is right and the other wrong. It is a point upon which there can be no compromise. The life of man is in the mean time the shuttlecock of these contentions. The profession can decide this point, and its voice should be heard.

The operation of placing a ligature on the common trunk of the iliac artery has been performed certainly fourteen times, and has succeeded in six instances—a success which would have been considered as really wonderful, as the operation would have been thought to have been impracticable some three score years ago. In two of the eight the peritoneum was necessarily opened, and they may be fairly omitted in the calculation of averages; so that the proportion of recoveries to deaths was equal, six to six. Of the six deaths four were from hemorrhage, and two from inflammation of the peritoneum and of the cellular membrane behind, as high up as, and around the kidney. The fourteen operations were performed by Messrs. Gibson, Mott, Crampton, Liston, Guthrie, Salomon, Syme, Deguise, Perigoff, Post, Stevens, Peace, Stanley, Hey—six Americans, five British, one French, and two Russian or German surgeons.

Mr. B. Phillips has shown the mortality in eighty-six cases of ligature of the external iliac artery to be twenty-one, or one in four. The deaths in proportion to the recoveries are only one-fourth as great as in the operation on the subclavian artery, and are as nearly as possible equal with respect to others which have been performed for all sorts of cases on the femoral artery at the lower part of the upper third of the thigh. There is no objection, then, to the external iliac artery being secured by ligature in cases of aneurism of the femoral artery, on the score of greater danger, for which complaint it has been principally done. The principal objections to it in the case of a wound of the femoral artery are—

1. Its inefficiency, in consequence of the bleeding being renewed from the wound in the artery at the moment, or after the interval of one or more days, by the restoration of the circulation in the vessel, through the medium of the collateral branches.

2. The occurrence of inflammation of or behind the peritoneum.

3. The greater probability of mortification of the extremity after the operation on the external iliac artery than on the femoral, but which, I trust, may hereafter be materially obviated by the continued gentle friction on the leg and foot, which I have recommended as so beneficial.

The femoral artery high up in the thigh, or in the first three or four inches of its course, is the stronghold of the Hunterian theorists. They have made their last stand on this part, and on this their principle must be approved and maintained, or condemned and abandoned. Their grounds of defence are two:—

1. That this is a part of the vessel on which the application of a ligature is not usually followed by success, owing principally to the uncertain origin of the profunda artery which is given off by it somewhere within this distance.

2. That an operation to divide the parts which cover the artery, in order to expose the wound in it, might lead to the death of the patient from loss of blood.

The hypothesis that the upper part of the femoral artery is a very dangerous and unsafe part on which to apply a ligature, originated I believe with Mr. Hadwin, late house-surgeon of the Leicester Hospital, who published a case of Mr. Hewson's, one of the surgeons, through Mr. Quain, in the 20th volume of the Transactions of the Royal Medical and Chirurgical Society, on which, and on the inferences drawn from it, Mr. Quain seems to rely, for the opinion he supports, that the external iliac artery should be secured by ligature in preference to the femoral artery at the part wounded.

CASE 90.—A man was admitted into the Leicester Hospital on the 18th July with a popliteal aneurism, which had probably been ruptured, so as to become in fact diffused, for which the femoral artery was tied at the margin of the sartorius muscle. On the 30th, bleeding occurred from the wound to eight ounces. Pressure was applied. On the 31st, the bleeding returned with such violence that the femoral artery was tied immediately below Poupart's ligament. The pulsation at the seat of the first ligature ceased, but in the evening there was a slight oozing of blood from the first wound.

Aug. 2. Bleeding recurred from the same spot; was arrested by pressure, but as soon as it was removed blood flowed in a stream as large as a quill. The wound and partial cicatrix were laid open, and an ineffectual attempt was made to find the mouth of the bleeding vessel. The limb was then amputated above the lower ligature, which was found on the lower end of the artery, which was quite separated from the upper end, the mouth of which was open.

On the 21st the wound in the groin was observed to bleed, and was arrested by compression; it again recurred, and on the 22nd, on its being renewed, the external iliac artery was tied. On the 28th the wound at the groin again bled. It was not thought right to tie the iliac in another place, and the pressure which had failed before was again resorted to, and with success, the patient being discharged on the 101st day.

Remarks.—The artery diseased, in all probability as high as the external iliac, was incapable of taking on healthy actions. The first ligature applied did not succeed in obliterating its canal, because these healthy actions could not take place in a diseased part. The second ligature below Poupart's ligament failed for a similar reason. The third, placed higher up, succeeded, the artery being in a more healthy state, as it usually is in cases of aneurism of the femoral artery. The point in this case most worthy of notice, and to which particular attention should be paid, is the manner in which the collateral vessels brought the blood round into the main trunk of the limb, and re-established the circulation in it, reducing the extremities of the vessels from which each of the ligatures had come away to the state of wounded vessels, although another ligature was still on the same vessel above the part which bled. This person's life was at last only saved by pressure on a bleeding point or end of the artery, the ligature above being unequal to prevent or arrest it. The conclusion which Messrs. Hadwin and Quain wish to draw from this case, as regards wounded and otherwise healthy arteries, is overthrown and disproved by the case itself, which actually shows the imperative necessity of tying arteries that bleed as near as possible to the bleeding points, and that a ligature placed above or at a distance is unequal to restrain the blood from flowing through an open extremity lower down, in consequence of the facility with which the collateral vessels, in many instances, re-establish the circulation below the ligature. That a ligature placed on an unsound artery should fail of success, is what every surgeon must expect. That it should fail at this spot, not because the artery was unsound, which was the fact, but because the profunda artery originated somewhere near it, is merely hypothetical and unphilosophical, one good reason being usually considered sufficient, without the aid of another of a very uncertain character.

I affirmed in 1815 that there was no foundation for the theory which declared that a ligature when placed on an artery such as the femoral would fail, if in the immediate vicinity of a collateral branch, in consequence of the flow of blood through this vessel preventing the obstruction and consolidation of the main trunk for a distance sufficient to enable it to resist the impulse of the blood from behind. It is a delusive theory, hastily formed, and pertinaciously retained contrary to observation and experience. The observations I have before made in Lecture 4 overthrow it in a manner which is perfectly irresistible, independently of the many other instances in which the same facts have been known to take place.

The origin of the profunda is easily ascertained during an operation, provided it is within half an inch of that part of the main trunk on which it is intended to apply a ligature; and it having been ascertained that it is not within this distance, the surgeon need give himself no more concern about it, more especially when the arteries are all sound, as is usually the case when they are accidentally wounded.

It will be proved in the cases which follow, that when a ligature is placed or has been placed on the external iliac artery, it is frequently applied in a similar situation with respect to the orifices of the circumflexa ilii and epigastric arteries. These vessels are not invariable in their origin; it differs in many instances; the ligature is generally placed between them, and at an unknown distance from either. The theory of the danger arising from the proximity of the origin of a branch is as good in one case as in the other; the actual danger, whatever it may be, is as great. The objection in one instance is quite as good, and no better than in the other, and it is, in my opinion, practically worth little or nothing in both. The essential point is that the artery in aneurism is sounder when iliac than when femoral. The soundness in wounded arteries is alike in both, and a ligature is as little likely to fail in one as in the other, whilst the danger of peritoneal inflammation does not exist when the ligature is applied to the femoral artery, and that from mortification of the extremity is infinitely less. If the ligature of the femoral artery should fail, as well as pressure properly applied, the iliac artery becomes a further resource. Mr. Key has shown in the Guy's Hospital Reports, in a case in which the subclavian artery was tied above the clavicle, and which he had the opportunity of dissecting twelve years afterwards, that the ligature was actually applied close to the origin of a large branch from the subclavian artery, and that it had not interfered with its consolidation; and I should think that, if these observations are duly considered, with the remarks I made on this point in my last lecture, the theory may fairly be considered as worthless with regard to wounded arteries.

In every case I have related or shall relate the loss of blood is stated to have been considerable at the moment of injury, but no reliance can be placed on the computation usually made as to the quantity. Operations were rarely done in any of these cases until rendered absolutely necessary by further losses of blood after repeated hemorrhages, and as to the fear said to be entertained of dividing the containing external parts of a small spurious aneurismal swelling, in order to look at the hole in the vessel, lest it should bleed so as to destroy the patient, it is

totally unworthy of a comment. I cannot understand how anyone can entertain such an apprehension. If it had not been advanced as a reason by men of undoubted ability, I should have looked upon it in these days, and after what has been done in all quarters of the globe, as an acknowledgment of incapability or imbecility, as it is, it is only, in my humble opinion, a bad reason put forward in a worse cause for the want of a better. The great principle of surgery on this point must never be forgotten, that no operation should be done until the wounded artery bleeds through the external wound, and then it becomes imperative. It must then be done on the spot, aye, and even if the iliac artery had been previously tied, or the patient will be lost.

CASE 91.—A soldier of the 38th regiment was wounded by a musket ball at the battle of Waterloo, which entered the thigh about three inches below Poupart's ligament, and lodged. He lost a considerable quantity of blood at the time, but the wound healed kindly, and he was discharged, cured, in about four weeks. On the 18th of August, two months after the receipt of the wound, he complained of a tumour, about three inches in length and two in breadth, which extended to within an inch of Poupart's ligament. The pulsation was powerful, and gave the feeling of a strong thrill with considerable resistance to the propulsion of blood. The cicatrix of the original wound was situated upon the tumour towards its upper part. It was deemed expedient to place a ligature on the external iliac artery on the 28th of August, and the man died on the 1st of September of mortification, which had extended to some three inches above the knee. The operation was performed with great dexterity, and no evil had resulted from it at the part operated upon. The ligature was on the artery *a quarter of an inch above the origin of the epigastric, and about an inch below that of the circumflexa ilii.* A small communication was found between the femoral artery and vein at the side of the tumour, about an inch and a half below the origin of the profunda. The covering of the aneurism was formed by the sheath of the vessel and the fascia of the thigh. The profunda was sound. The whole limb was in a state of gangrene.

Remarks.—The operation on the external iliac artery was done on the aneurismal theory of Mr. Hunter, and the man lost his life from mortification, the collateral branches not having had time to enlarge so as to carry on the circulation. If the small tumour had been laid open and the artery secured above and below the opening in it, mortification would not, it may be presumed, have taken place. The opening in the vein, if it became necessary to operate upon it, should have been closed by passing a tenaculum beneath its cut edges, and surrounding it by a single silk thread, which on separating need not necessarily have destroyed its permeability. Three or four days would at all events have been gained before any bleeding would have taken place, in which case a ligature might be placed around it, and the collateral arterial circulation might by that time have been established. This case teaches the important lesson, that when an aneurismal tumour is rapidly formed after an injury, and operated upon at an early period, the collateral branches will not always have had time to enlarge to such a degree as to carry on the circulation, and the patient is lost, when a little more delay and a different operation might have been attended with a favourable result, the artery itself, with the exception of the hole in it, being sound. It is now admitted, when the vein is wounded and a varicose aneurism forms, that the operation must be done at the part injured.

CASE 92.—M. Delpech about the same time, July 15, 1815, tied the external iliac artery for an aneurism similarly situated. The patient died from mortification.

CASE 93.—Osten Cooper, of the 2d battalion 1st regiment of guards, thirty years of age, was wounded at the battle of Waterloo, on the 18th of June, by a musket ball, which entered the left groin a little below Poupart's ligament, passed through the thigh, and was cut out the following day a little above the smaller trochanter. Nothing remarkable occurred until the 29th, when the slough from the anterior wound came away, and was followed by so frightful a hemorrhage as to leave no doubt whence it proceeded, nor (from the wound being so high up) any alternative in the opinion of the surgeon as to the means to be adopted for stopping it. The external iliac was therefore immediately exposed, secured by a double ligature, and divided; the ends of the artery immediately retracted more than half an inch. The sides of the wound were then brought together by adhesive straps, and the operation was finished without loss of blood. Arterial action was so high, that twenty ounces of blood were taken from the arm; the limb was rolled in flannel, and warm jars kept to the foot.

Remarks.—This man died on the 5th of July, seven days after the operation, of fever of a typhoid character then endemic in the country, and which from the second day left little hope of recovery. The operator in concluding his statement, which I published at length in my book on the Diseases and Injuries of Arteries, says, "In this case the necessity of the operation is evident, and, as far as it went, also its success. Not a drop of blood was lost after it. That the patient died from intermittent fever running into the continued form, and that of the typhoid type (induced probably by loss of blood), no one who has observed the endemic disease of this climate will be inclined to doubt." Mr. Liston, in supporting the practice he pursued in the case of Mr. Seton by precedents, has adduced in a particular manner this one of Osten Cooper from my book (according to the report of the three weekly medical journals), and has erroneously attributed the above remarks to me; adding, after transcribing the last, "So says Mr. Guthrie, who it is to be presumed conducted the treatment of the patient." I do not object to Mr. Liston having made use of me in this way. I must be permitted, however, to say in my turn, that I never saw the manner knew of the operation until the case was sent to me by the staff surgeon who did it. I published it in the midst of several cases showing the impropriety of such an operation, and in a part of my book in which it is said I criticised rather sharply the Baron Dupuytren for recommending a similar practice. It is my duty, however, to express the great regret I feel at having so misled Mr. Liston by my negligence or by my delicacy towards my old friend the operator, as to have caused him to misconceive my meaning, and I consider myself justly liable to bear a large proportion of the blame of any evil which may have been occasioned by them. In thus acknowledging the error I unintentionally committed, I am the more bound on this occasion to make my meaning so plain that it cannot again be misconceived. I shall therefore say, that if this man, Osten Cooper, had not died of fever, he would in all probability have died from a recurrence of the hemorrhage from the original wound, in consequence of the right operation of tying the artery having been done in the wrong place, and where it would be of no use unless by accident.

On the peace of 1814 being made, I was placed on half pay, with a month's notice to quit, something like a turned-off footman, and was obliged to seek for other employment. The hundred days of Napoleon found me trying to establish myself in London. I had placed my all on the hazard of that cast, and I was obliged to await the result. Three general officers, high in rank, requested me to accompany them on service, and to live with them during the campaign of Waterloo. My old and kind friend Sir James M'Grigor, then just appointed director general, offered to place me on full pay for six months; I would willingly have served for three, but that would have been thought a job,—that the service had been made use of to favour my views. I therefore went to Brussels and to Antwerp, like other amateurs, without rank, pay, or any appointment. The whole of the medical officers received me as no other person had ever been received. they all said, we know your object, and everything we have in our charge is at your disposal' we will do everything you wish, and do you what you please. I visited the severest cases only. There was not a mother, wife, or sister of a badly wounded officer at Brussels whose knees were not bent to me, not a father or a brother whose hat was not off and down to the ground. I was as poor as a rat in those days, but my opinion was not to be purchased, no one presumed to think of such a thing; now that I am not so poor a man, and my opinion may be more valuable, every one thinks he does me a favour who gives me one or two guineas for it. Perhaps it may be so. I was then however more gratified in working for nothing than I now am for money. All the senior officers of hospitals offered to send to London any of their bad cases that I could obtain permission to bring over. I did two operations only at Brussels and none at Antwerp. One an amputation at the hip-joint, the second the operation already related, and a third man was sent after me, who had a ball rolling about in his bladder, whom I afterwards operated on successfully in the York Hospital, Chelsea. A large body of military and medical staff officers were present to see me remove the ball, which had become encrusted and formed a stone. The Duke of York himself visited this man, and took so great an interest in him, a German, and in the Frenchman whose thigh I had amputated at the hip-joint, as to obtain for both pensions, and for the latter a place in the Hotel des Invalides in Paris, where he was for many years the only living instance of a successful operation of the kind. Two large clinical wards were given to me by Sir J. M'Grigor for two years on the same terms, viz., that I did the duty without any remuneration whatever. These were filled with the worst and most interesting cases my friends could send to me, not only from Brussels and Antwerp but latterly from Harwich, Colchester, and Chatham. They were given for the purpose of enabling me to deliver these lectures to the officers of the public service with advantage which I continued for five-and-twenty years, and of which those I am now giving are really a continuation. It will now be readily understood why I could not publicly find fault with any of the gentlemen who had behaved so kindly to me, and particularly with the surgeon of Osten Cooper; and you will observe in these lectures, that wherever I have not approved of the practice pursued in any case, I have not named the surgeon in charge of it. I want merely the fact for the benefit of science, not the inculpation of an individual.

If, under these circumstances, I sometimes address you more dictatorially and magisterially than may appear befitting, I will beg of you to bear in mind that on many of the points in question I have had greater opportunities of acquiring information than most persons now living, and I may be permitted to add the expression of my regret that I should have made comparatively so little use of them. On many of the great occasions to which I have alluded, there was scarcely time for a remark, much less for written notes to assist the recollection.

I have given you this slight sketch of things long since passed away, that you and others whom I sometimes annoy by my representations, may be aware why I interest myself on all occasions in favour of the wounded soldier, his medical attendants, and the reputation of the surgery of the public service; that you may also know that all the favour which ever has been shown me has been to give me opportunities for good hard work, and for which I was then thankful and am now grateful. With respect to advancement, emolument, or rank, I hold the same rank and station and have the same half pay I was entitled to in 1812, when I had the charge of two-thirds of the British army under Lord Hill opposed to Marshal Soult in front of Madrid.

CASE 94.—Dr. Buchanan relates the case of a boy in the 5th vol. of the *Glasgow Medical Journal* for 1832, p. 151, who suffered from hemorrhage, which caused him to do the operations of tying the femoral, inguinal, and external iliac arteries. The boy had been injured on the 15th January by the wheels of a rail-waggon, which caused a mortification of the skin and subjacent tissues of the upper part of both thighs, and of the lower part of the abdomen. The ulceration left on the separation of the sloughs contracted into a deep unhealthy looking hollow in the left groin, which had partly filled up, and he was gradually becoming convalescent, until eighteen days after the accident, when hemorrhage to the alarming extent of thirty ounces took place, and only stopped on the boy's fainting. A coagulum formed over the part whence the blood came

and the femoral artery could be felt immediately below it in the hollow alluded to. From the state of great depression in which he fell he had gradually recovered during the three subsequent days, when a second bleeding took place to the extent of a pound, and which issued from a small aneurismal pouch, about the size of a field bean, in the centre of the soft flabby ulcerated hollow in the left groin. The hemorrhage was restrained by compression with the finger on this spot, and all operative process was deferred in consequence of the great state of exhaustion of the patient, from which he again recovered. Nine days afterwards a slight bleeding recurred, and was easily arrested.

On the 26th of February, or forty-two days after the accident, bleeding again took place to the amount of two ounces, and was arrested by compression with the finger. The wound being minutely examined in consultation, the compress was removed, and was followed by a gush of arterial blood, which was at once stopped by the finger. It appeared to come from the femoral artery, which, with its sheath situated in the hollow before referred to in the groin, seemed to be in a soft and friable state. The external iliac artery was then secured by ligature, and the bleeding ceased. No pulsation could be felt next day in the left femoral or popliteal artery. Four days after the operation, or on the 2nd March, at seven in the morning, bleeding again took place from the same spot as before to the extent of an ounce, the patient stopping it himself, although it returned at two different periods before two o'clock on attempting to remove the finger from the hemorrhagic spot. Suppression of bleeding and pulsation was effected by compression of the femoral artery on the distal side of the place whence blood issued. The femoral artery below was tied, but in vain, for the hemorrhage recurred with equal violence on the removal of the compression made by the finger over the bleeding spot. It was then thought right to place a single silk thread ligature on the inguinal artery immediately above the bleeding point, underneath Poupart's ligament, on tightening which the pulsation and hemorrhage were instantly arrested. On the 6th, or four days after this operation, pulsation could be detected in the popliteal artery. On the 15th the boy died from exhaustion, the effect of a large abscess on the ilium and sacrum, the surgical wounds being nearly healed. The ligatures on the femoral and inguinal artery, applied on the 2nd of March, came away on the 12th.

Remarks.—The ligature on the external iliac was useless, and should not have been applied, as it did not prevent the collateral branches, and principally the epigastric and circumflexa illi arteries, from restoring the hemorrhage through the inguinal, the ligature on which alone was really efficient, and ought to have been applied in the first instance. The ligature below the wound in the femoral artery would in all probability have become necessary, even if this had been done. This case is one of the best possible proofs of the soundness of the principle that a wounded or injured and bleeding artery is to be tied *immediately* above and below the seat of injury, and not at such a distance as admits, as in this case, of intervening branches.

CASE 95.—A gentleman received an injury in the upper part of the left thigh, parallel to, but some little distance below Poupart's ligament, from having ridden against the shaft of a van. The late Messrs. Heaviside, Howship, and Chevalier were sent for immediately, and my assistance was desired next morning. I called the attention of these gentlemen to the tallowy-white and mottled appearance of the foot and lower part of the leg, as indicating the loss of life from a deficient supply of blood, and assured them that the femoral artery, and probably the vein, were injured. In the mortification they would not believe, until it became too obvious as a case of dry white gangrene, the foot and leg shrinking and drying, whilst the course of each of the tendons on the instep and toes was marked by so many dark red lines. Amputation of the mortified part they would not hear of; they thought me (it happened many years ago) remarkably wild in my ideas, and as I was only a consultant, I yielded. On the eighteenth day after the accident blood flowed from the wound in an alarming quantity, and of a dark venous colour. This I pronounced to come from the lower end of the artery. My friends thought me a little more wild than before, and as the wound was so near Poupart's ligament, they proceeded, in spite of all my remonstrances, to tie the external iliac artery, which did not stop the bleeding. As I had predicted that it would not do so, they now began to think I did know something about the matter, and desired me to do what I pleased. I therefore enlarged the original wound in the thigh, sought for the lower end of the artery, which the dark flowing blood readily pointed out, and secured it by the ligature. The bleeding ceased, but the man died exhausted some days afterwards.

Remarks.—This is a remarkable case, and which I did not think it right to make known in its details during the lifetime of either of the surgeons concerned. There were nothing but errors committed in its management, simply because my colleagues knew little or nothing about the matter. They had not seen anything of the kind. Mr. Heaviside was too old to yield. Messrs. Howship and Chevalier were incredulous, and I was then too young to command that confidence which my knowledge authorised. The operation which ought to have been done on this man was to have enlarged the wound, and have tied the femoral artery at the lower part, from which it bled. The upper end would in all probability have given no trouble, and it would have been easily secured, if it had. The theory of aneurism, and the desire to do an operation then rather uncommon led to the ligature of the external iliac, and so signal an exposure of the failure of the theory, and its inapplicability in such cases ought to be convincing, whilst the propriety of, and actual necessity for, seeking for the divided and bleeding artery are made equally manifest. The remaining surgical point is yet, although near thirty years have passed away, of more importance still. The essential surgical question to be asked is, what ought to have been done with respect to the mortified limb? The followers of Mr. Hunter, as well as most modern surgeons will say, wait for the formation of a line of separation, and then amputate the limb. My reply is that the man did not live long enough to see that day, and that in such cases men never will live long enough for it to take place, and that as early an amputation as the recognition of the mortification will permit should be had recourse to. A more important question yet remains. At what part ought the limb to have been amputated in this case, and in other cases of a similar nature.

In Case No. 24, that of Turnbull, I desired the limb to be cut off below the knee. I should have done the same in this case. The principle on which it is done I have pointed out in my work on Gunshot Wounds, with reference to the distinction between constitutional and local mortification. The mortification in both these cases was for the first two or three days almost entirely local, and the amputation would have succeeded at that time, before the constitution became implicated. By doing it below the knee, that joint would have been saved, and the collateral circulation would have been sufficient to preserve the life of the thigh between the knee and the wounded part of the artery, the profunda femoris being intact. It may be said that a greater security would be obtained by amputating the thigh at the wound, and this would be the best mode of proceeding if amputations so high up were not generally unsuccessful.

CASE 96.—In this case, published by Mr. Norman in the 10th vol. of the Medico-Chirurgical Transactions for 1819, John Lacey, a boy fourteen years of age, was wounded on the 21st of August by a pitchfork on the upper and outer part of the thigh, which bled profusely at the time, and slightly on several occasions afterwards, until the 29th of September, when the bleeding was so profuse that it was thought right to endeavour to find the bleeding artery. An incision seven inches long was made, but the artery could not be discovered on removing the coagula although an immense flow of blood followed their removal. As pressure on the groin arrested the hemorrhage, when the hand was passed into the cavity which had been laid open, and the finger within it reached the spot where the assistant compressed the artery in the groin, Mr Norman tied the external iliac artery. This did not stop although it diminished the bleeding, and Mr. Norman therefore tied the femoral artery below Poupart's ligament, and completely and finally arrested the hemorrhage. This boy at last recovered with the loss of his leg from mortification, which appeared six days after tying the external iliac, and was amputated above the knee.

Remarks.—Mr. Norman says plainly that the hemorrhage was arrested by the ligature below Poupart's ligament, and not by that on the iliac, which was therefore useless, and by giving rise to the mortification placed the boy's life in the greatest jeopardy. The amputation above the knee, and not as high up in the thigh as the wound, is the crowning point of this remarkable and most conclusive case.

CASE 97.—M. Lutens (*Gazette Médicale*, 1842) placed a ligature on the external iliac artery in consequence of a wound of the femoral artery, some lines below Poupart's ligament, which had bled several times. The ligature having been applied during hemorrhage, the compress on the bleeding part was taken off as soon as it was tightened, when the hemorrhage returned as furiously as before, on which a second ligature was placed on the external iliac higher up, which failed equally in arresting the bleeding. It was now manifest that the epigastric and circumflexa ilii arteries poured their blood into the open femoral artery by regurgitation, and that the extremity of this vessel must be secured. To do this M. Lutens laid open the diffused aneurismal swelling, and after overcoming great difficulties tied the femoral artery below the origin of the profunda. A stream of blood still flowed from the wound, but was stopped by cold water. Mortification of the leg followed these operations, and the man died. On dissection it was found that the first and second ligatures were placed above the origin of the epigastric and circumflexa ilii arteries. The last was placed below the profunda, so that three vessels entered into the artery between the ligatures, and brought blood collaterally into it, two above and one below the opening made by the point of the sword.

Remarks.—It was utterly impossible for either of these ligatures to have suppressed the hemorrhage, unless these three communicating branches should have failed to bring blood into the main trunk from their collateral communications—a result which no educated men can reasonably have a right to expect. This case proves, in an incontrovertible manner, the impropriety in the first instance, of placing a ligature on a wounded artery anywhere else than on the wounded part.

CASE 98.—Bonnet was struck in a quarrel by a knife in the lower part of the upper third of the thigh, which was in vain attempted to be arrested by compression, under which a large diffused aneurismal tumour formed. The femoral artery was tied immediately below Poupart's ligament. Twenty-seven days afterwards, and seven days after the ligature had been detached, the patient walked down stairs, and brought on a bleeding, which was stopped by compression, but returned on the third day. Again arrested by the tourniquet, it returned two days afterwards. The surgeon decided upon now tying the femoral artery above the origin of the profunda. In doing this he introduced his finger into the hole whence the bleeding came, and thus arrested the hemorrhage. Disappointed in finding the situation of the profunda, he proceeded to tie the external iliac. The bleeding was now finally restrained, and the patient recovered.

Remarks.—The first ligature was applied after the method of Anel, and above the profunda, through which it is possible blood was brought back into the wound. When the supply from the epigastric and circumflexa ilii arteries was cut off, the hemorrhage ceased. Accident alone prevented its renewal, for the bleeding would certainly have returned if the collateral vessels had been very active, whilst the life of the limb was greatly endangered by the supply of blood through them being cut off.

CASE 99.—M. Jobert, in the Hospital St. Louis, at Paris, tied the femoral artery an inch below Poupart's ligament, and above the profunda for a wound in the femoral artery where it lies under the sartorius muscle, and had formed a diffused aneurism. On the seventeenth day the patient died after four hemorrhages from the end of the tied artery, proving the insufficiency of the distant ligature with

such an intervening branch as the profunda femoris. —*Gazette Medicale*, 1839.

CASE 100.—Dr. Placide Portal, of Palermo, removed some enlarged glands from the groin. Secondary hemorrhage followed, and the external iliac was tied above the epigastric artery. The third day the bleeding from the wound returned, and a ligature was made to surround the femoral artery and vein at the bleeding point. The bleeding ceased, but the man died of peritonitis and gangrene of the limb, caused by the useless operation on the external iliac artery.

CASE 101.—A gentleman, thirty-nine years of age, struck his thigh with the end of a fowling piece between the upper and middle third parts, and two months afterwards perceived at this spot a small but strong pulsating swelling, which gradually increased in size. At the end of twelve months it extended from within an inch and a half of the crural arch to where the artery passes through the triceps muscle. It had an elevation of three inches, and could not be covered by two hands laid over it. A ligature was placed by Dr. Murray on the femoral artery, at about an inch below Poupart's ligament, on the 20th of September (the operation of Anel). During the first fortnight he suffered most distressingly from flatus in the intestines, which was only effectually relieved by the introduction of Dr. O'Beirne's tube into the rectum. On the fifteenth day after the operation violent hemorrhage took place, to the extent of three or four pounds, and he seemed to be about to die. A ligature was then placed on the external iliac artery, and the bleeding ceased, which it had indeed done under pressure upon the bleeding part before the ligature was actually tightened. On the fifteenth day after this second operation, on the 27th of September, bleeding again took place to the amount of three pounds from the first wound made in the groin, from which it flowed, not by jerks, but in a continued uniform stream, although of a red colour, and was restrained by pressure made below on the side of the aneurism, showing that it came from the lower end of the vessel. Pressure by graduated compress was made upon this part, and steadily kept upon it by bandage; the bleeding did not return, and the patient ultimately recovered.

Remarks.—Dr. Murray acknowledges that the first bleeding came on, in all probability, from the same place as the second, and that the ligature on the external iliac artery was unnecessary, although he strongly recommends that the external iliac should be tied in such a case in the first instance, and being one of aneurism of twelve months' standing, after a blow which might cause disease in the artery to some distance, he is certainly right in his recommendation. If, instead of being a case of aneurism from a blow, it had been one of a wounded artery, or of a diffused aneurism communicating with a wounded artery and an open wound externally, tying the external iliac would have been of no use. Compression could not have been so readily made, and an operation for securing the vessel at the part injured must have been done. Would any surgeon with an open wound in his own femoral artery an inch and a half below Poupart's ligament feel satisfied with having his external iliac artery tied, trusting to pressure on the wound to prevent hemorrhage? He would fear that both ends of his femoral artery might bleed through the hole in the side of the vessel, and that a ligature would be ultimately necessary above and below it, proving that he had run the risk of the ligature on the external iliac artery for nothing.

APPOINTMENTS.—Surgeon: T. Gibson, to the Eurydice. Assistant-Surgeons: H. Crocker, to the Ocean, vice Emslie; S. Clift, to the Sampson; J. G. Campbell, to Plymouth Hospital; C. Ede, to the Constance; J. P. Lawrence, to the Shearwater; R. King, to the Eurydice; Dr. J. Barclay, to the Canopus.

BUCKINGHAM PALACE, MAY 29.—His Royal Highness Prince Albert has been pleased to appoint Surgeon Major William J. Judd, of the Scots Fusilier Guards, to be Surgeon in Ordinary to his Royal Highness.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XII.

PRURIGO.

According to Willan, and others.

GENERA.	SPECIES.
Prurigo.	P. Mitis
	Formicans
	Senilis
	Sine Papulis
	Præputii
	Pubis
	Urethralis
	Podicis
	Scroti
	Pudendi

As proposed by Startin.

GENERA AND SPECIES.	DIVISIONS.	FORMS
PRURIGO.		
P. Simplex vel sine papulis	Localis.	Diffusa
Mitis	Generalis	Circumscripta
Formicans	Interna.	Inveterata vel chronica
Senilis		

GENTLEMEN,—In all the cutaneous diseases which have hitherto occupied our attention, external appearances have manifested, more or less, not only the precise nature of the complaint, but data to account for, and perchance explain, the symptoms and sufferings of the patient; but in the disease termed prurigo, which this day forms the subject for our consideration, there are no such appearances; indeed, your diagnosis of the complaint must always be founded rather upon the symptoms of nervous irritation, and general disorder which accompany it, than on any morbid phenomena that meet the eye, should such be found to exist.

It has been customary to divide prurigo into three or four species, which have been named P. sine papulis, P. mitis, P. formicans, and P. senilis; in addition to which there have been six or eight local varieties of prurigo called after the part of the body they occupy; but this extended subdivision, I think, wants revising, as several of these local irritations commonly depend on other diseases, and therefore it is a mere application of the term prurigo to the symptom of itching in the part; we will therefore consider this malady as we have done others in former lectures, and we will divide it into four varieties—P. simplex, vel sine papulis, P. mitis vel cum papulis, P. formicans and P. senilis, while each species will have a local, general, and internal division, and may appear under the forms termed circumscripta, diffusa, and inveterata.

Prurigo may be defined to be an intense, obstinate, and painful itching, affecting the papillæ, which appear slightly enlarged and elevated on one part or the whole surface of the body; the complaint being commonly subject to remissions and violent exacerbations, which occur in paroxysms. This disease is not contagious, and to the eye presents little or no change from the normal state of the surface, there being no visible redness, inflammation, or discharges, unless produced by the incessant scratchings to which the parts are subjected, when marks of the nails and small dark-coloured spots, or crusts, which the microscope proves to be composed chiefly of blood discs, are the only morbid phenomena, beyond an elevation of the papillæ of the skin, like the appearance called cutis anserina. There will be no difficulty in distinguishing cases of prurigo if this definition be kept in view; but otherwise, and if you refer to the appearances of the disease, you will constantly find that it is confounded with lichen, strophulus, and scabies; you must therefore rely solely upon the duration of the complaint, the violent paroxysms of itching, scratching, tingling, and burning which constantly attend it, and are so disproportionate to all visible causes. I shall briefly review each species of this neuralgic itching, so that it may not escape your notice—a matter of some importance, as it perhaps is more frequently met with in the respectable walks of life than any other cutaneous affection.

Prurigo sine papulis is the simplest form of the disease, and was first noticed, I believe, by Thompson in his edition of Bateman's Synopsis. It is constantly met with at all ages, and manifests itself for the most part without any obvious cause, being more common amongst males than females—a fact I believe arising from the greater development of the hair on the body of the former, for I have constantly found this form of prurigo to depend upon the circumstance of the extension of the cuticular scales or secretions, over those portions of the epidermis naturally pierced by the hairs, which occasions these bodies to be curled up beneath it, instead of protruding in the natural manner, and thus the parts around are irritated, and the prurigo produced. I am not aware that this common cause of irritation has been noticed by authors, but it is so usual, that nearly every one may verify it on his own person, particularly on those parts which are subjected to the friction of the clothes, as the front of the thighs and the outside of the upper arms, or shoulders; in other instances this prurigo appears without any assignable cause, local or general, the irritation recurring at intervals from exposure to heat, the warmth of the bed, &c. Yet I think in most of these cases the cuticular surface is out of condition, and is dry and harsh, consequently obstruction is occasioned to the exhaling functions of the dermis, which produce the itching and irritation characterising the complaint. This view of the case is also proved by the relief constantly afforded by baths and frictions of the skin, which are much aided by the use of glycerine, and in the majority of instances these means are sufficient for the removal of this usually slight disorder. It may also be remarked that this and the other species of prurigo often appear as sequelæ to various cutaneous diseases, apparently from the imperfection remaining in the regenerating function of the skin, or from a continuance of more or less morbid action in the parts, after the cure of the original affection.

Lichen, psoriasis, eczema, scabies, and impetigo, may be cited as the diseases most commonly followed by the pruriginous condition of the surface, and it is observable that complications of prurigo under these circumstances render both affections more rebellious in their nature, and consequently their cure becomes more difficult and uncertain.

Prurigo mitis (the second species on the chart) consists in violent itching and irritation, which may be local or general, without redness; the appearances presented by the disease are manifest in the model. You will perceive it consists in little more than an hypertrophied condition of the papillæ of the dermis; in fact, it is a connecting link between lichen and pruriginous diseases; one degree of inflammation beyond that exhibited would refer the complaint we are considering to lichen simplex—indeed, if I may be allowed to repeat an observation I have made in nearly every lecture, it is most difficult to determine with the desirable accuracy the boundary between these affections, so much so that I should be inclined to consider prurigo, *when attended with distinct papulæ*, as a lichen; in fact I would make this manifestation the distinctive mark of the latter disease, whilst *neuralgic itching and absence of papulæ* would characterise the former.

There seems to be a sort of cruel pleasure experienced by patients in violently scratching the body in this disease, which disposition can scarcely be controlled by time, place, or circumstances, the irritation giving rise to such proceeding being excited by the slightest causes, as the friction of the clothing, an approach to the fire, exercise, &c.; yet remissions of some hours are of constant occurrence, and may be prolonged for days or weeks, when the mind is fixed upon other matters; indeed, the prurigo may disappear under such circumstances, as also during the progress of acute diseases.

Prurigo mitis for the most part attacks the young during the teething process, or those of more advanced age who are addicted to irregularity of living or excess in spirituous beverages, thus resembling lichen simplex of infant and adult life.

Patients affected with this species of prurigo describe the irritation and itching to be situated between the skin and flesh, and to be too tormenting for endurance. When this sensation is attended by feelings of crawling and creeping, it is then to be referred to the next species, called from

that circumstance prurigo formicans, which is in fact the prurigo sine papulis in an exasperated or more severe form. It is said the papules are larger and flatter in this species of prurigo. I assure you a tolerably extended experience has not assured me that this is the case; nor that this complaint, as stated by authors, "does not attack the face and the palms of the hands," as in several instances I have witnessed its existence in these situations, and have very commonly found it when thus placed to depend upon gastro-intestinal irritation, often arising from the presence of worms. I have no doubt, however, that these and other modifications of prurigo are in a great measure to be referred to constitutional peculiarities in the patient.

The parts most frequently affected with prurigo formicans, though none are exempt, are the outsides of the limbs, the front of the chest, the loins, and shoulders; the torments it occasions almost defy description. Patients continually describe these irritations as accompanied with burnings and prickings, as of hot needles penetrating the skin, or the stings of insects, as ants, wasps, &c., which occasion the unhappy sufferers to scratch themselves with a sort of mad despair, and to use the roughest materials to accomplish their purpose; the pruriginous irritation is augmented and aggravated by such proceedings in a manner difficult to describe, whilst a contraction of the muscles and excitement of the nervous system often supervene, bordering in their nature upon an epileptic paroxysm. The skin offers little more for our observation in prurigo formicans than in prurigo mitis; indeed, the only evidence in both affections that is observable, is occasioned by the actions of the patients rather than by the disease.

Prurigo senilis, like those species already mentioned, may be either local or general, and it differs only from them in attacking the aged and asthenic, whose circulation is feeble and declining; which circumstance modifies, whilst it prevents the disappearance or cure of the complaint; for it is observable that when P. senilis affects such parties, it mostly remains to torment their latter days, till death closes the scene. But here I would impress upon you the absolute necessity for a rigid examination into such cases and a minute inspection, lest psoriasis, lichen, scabies, or various eruptions which are syphilitic in their origin, be mistaken for prurigo—as I need not tell you the former are much more yielding to therapeutic means than the latter; indeed I may say that they can very constantly be cured.

I shall not particularise the local forms of prurigo mentioned by authors, as any of the former species may have a local existence, and no practical results arise from such distinctions; yet when a prurigo is situated near any of the openings of the body, as the anus, the urethra, the nostrils, &c., the irritation may extend within these parts, and thus form the division I have designated prurigo interna, which may exist without any external manifestations or previous disorder on the surface. In the latter case, it is usually symptomatic of some other, and perhaps distant, disease, as worms, strictures, polypi, tumours, &c., which must not be forgotten when attempting to relieve this troublesome and afflictive complaints. I may also mention that prurigo is very commonly complicated with long-standing local and general disorders, and particularly with those affecting the circulation—a circumstance that need not surprise us, when we reflect that the seat of the disease is in the papillæ of the dermis, largely composed of erectile tissue, which forms the chief connecting link between the venous and arterial circulation, and in consequence will not fail to evince disorder in even slight derangements of either of these systems.

As an illustration of the effect of a local interruption in the circulation, in producing pruriginous complaints, the consequences of varicose veins in the legs may be cited, which not only may produce prurigo, but lichen, impetigo, or eczema. A similar occurrence may also be noticed in a form of P. pudendi muliebris, which occurs during pregnancy, and is owing to the œdema of the parts arising from the pressure of the gravid uterus on the pelvic veins. The abstraction of blood from the dilated vessels gives speedy relief in both these cases, and thus confirms the view taken by a converse experience.

The treatment of prurigo differs little, if at all, from that recommended for lichen, and the disorder commonly yields to the measures employed when the subject is young, and free from organic disease. In all local forms of prurigo, as before stated, an examination should be insisted on, and instituted with care and precision, otherwise more important diseases, of which the irritation is but a symptom, may be overlooked.

At this moment I have a patient under my care with prurigo pudendi, who had consulted most of the eminent men in London on her complaint, and had used lotions, baths, &c., ad infinitum. An examination proved the pruritus to arise from a small, irritable, vascular tumour, that, in shape of the crest in a cock's comb, occupied the meatus urinarius. A pair of curved scissors and hook forceps at once cured this prurigo, by removing the excrescence. Amongst the most useful remedies in prurigo, the vapour or the hot-air baths may claim citation, and they may be applied locally in the way of douche, or generally as a bath, and with or without medication. I have found cinnabar fumigations often of great service, and the ioduret of sulphur employed in the same manner, while chalybeates, the mineral acids, opium, and ammonia have proved, in my hands, the most useful internal medicines.

I have never found any benefit arise from mercurial or arsenical preparations in cases of true prurigo; on the contrary, they usually aggravate the complaint, affording relief only in local psoriasis, eczema, &c., with which the disease may be confounded, and thus furnishing a means of diagnosis between one and the other disorder. The same observation is also applicable to sulphur in its uncombined and modified forms.

In prurigo senilis I have latterly witnessed considerable comfort to the patient arise from the use of glycerine and trisnitrate of bismuth, or powdered talc, used as a liniment by the aid of a flesh brush, as also the bichloride of mercury and creosote in aqueous solution; but I will briefly read a few cases from the register, which will shortly put you in possession of the principles which in this Institution direct the treatment of these rebellious and troublesome affections, and I would only premise, that the same plan of treatment is required for each variety of the complaint, whether it be circumscribed to one locality, diffused, or spread all over the body, or inveterate, combining more or less of the two former varieties with chronic existence, and consequent obstinacy; of course in the latter case, our perseverance and the remedies employed must be in a proportionate ratio, and I need not again mention that any exciting cause, local or constitutional, must be diligently sought out, and, if possible, removed before attempting any special treatment. P. interna is almost constantly a symptomatic disorder, which, as in the instance of the lady I have alluded to, very constantly yields when the cause is removed. At this moment I have another striking case of the affection under my care, the left nostril being the seat of the malady, and which from a greater size of the left cheek than of the right, I have little doubt arises from disease, and perhaps tumour of the antrum; a malady that you know will require one of our most important and bold surgical operations for its relief: an operation that, by the way, I may remark, implicates few blood-vessels of size, and little nervous or vascular structure, and, therefore, is not fraught with the danger that might be apprehended. I beg, Gentlemen, you will excuse this seeming digression from our subject, on the plea of its having been introduced to show that a complete and practical knowledge of our profession is as necessary to the successful and scientific practice of the dermatologist, as it is to any other department of medical and surgical science. Indeed, in cutaneous complaints, such knowledge may be held to be especially requisite, as they are constantly but the external manifestations of internal or distant disorder or disease; but enough has been said on this subject, and as I perceive our allotted time is nearly expiring, I will conclude with a short recital of the cases with which it will be my endeavour to exemplify our subject.

With respect to the malady I have designated on the chart, prurigo simplex vel sine papulis, the cases of this affection must be so familiar, that an example can scarcely be required, as frictions with a rough huckaback towel (*technice* a medical rubber), a horse-hair-glove, or the flesh-brush, with local or general baths, for the most part constitute all the remedies required for its removal; I shall, therefore, mention a case or two only of the more severe forms of the complaint; and first an instance of prurigo mitis, though the epithet mild prurigo might also seem to justify an opinion of this species, yet its obstinacy is often such that I will relate the case from which the model before you was cast.

Clara Kibble, aged four years, of 20, Pelham-street, Spitalfields, was admitted on the 18th of August last, having suffered, more or less, for three years from her complaint, which her mother who attended her, yielding to a common prejudice, attributed to vaccination, as the eruption and irritation appeared soon after the child had undergone that process. The symptoms were those of prurigo mitis, paroxysms of irritation coming on particularly at night, whilst the surface of the body manifested the symptoms represented on the cast. You will perceive there was little or no inflammation in the papules, which are of the colour of the surrounding skin, and are more readily recognised by the touch than by the eye. This child did not appear to be suffering from any constitutional malady, but the disease seemed rather to consist in a morbid habit of the surface, which was kept up by the constant scratchings of the little patient, than from any malady internal or external; consequently, tepid baths of milk and water were ordered daily, and ablutions with decoctions of linseed, whilst creosote water was applied as a lotion, and alterative mercurials at bed time, with liquor potassæ and iodide of potassium during the day, were administered internally. By a persistence in these means, with slight modifications from time to time, for a month, the skin resumed its healthy state, and the prurigo disappeared.

I have no model of prurigo formicans, nor is it necessary, for save a few papules of the colour of the skin scattered here and there, and a minute bloody point on the summit of those which have been scratched, no abnormal appearance presents itself.

One of the most remarkable cases of this afflicting disease to be found in our register is that of Edward Leveritt, aged forty-one, of Warwick-street, Regent-street. This individual had filled a respectable station in life, that of a commercial traveller, but he stated that he had been reduced to complete poverty by the torment and misery his disease had occasioned him, which had not only obliged him to relinquish his situation, but had driven him off the road.

He stated, that in the hope of obtaining a cure he had sought this Institution as a final resource, having expended his last shilling in attempts to gain relief, but that he had never experienced an hour's ease since the appearance of his malady, three years ago, when it originated without any cause that he could trace, beyond the vicissitudes of temperature to which he had been constantly exposed, and the chance that he might have slept in a damp bed.

On his attending at the Institution his condition was as follows:—He was of a somewhat florid complexion, and not deficient in muscular development and strength. His pulse was slow and feeble, and his excretions and appetite natural. Over every part of his body the most intense and stinging itching existed, so that directly his arm or any part of his body was exposed, he could not refrain from scratching. This was more especially the case on the back, shoulders, and outsides of the arms, but no part of the body was exempt—the ears, and scalp, and nose, even participating in the pruritus.

On examination, little or nothing could be perceived to account for so much uneasiness. I have often seen the cutaneous papillæ more developed where the skin might be said to be in a perfectly healthy state. Here and there, however, were slight ulcerations, covered with a bloody crust, which had evidently been occasioned by his nails, or the friction to which he subjected the parts, and had no reference whatever to the symptoms of irritation that were manifested. He described his sensations to be those of a crawling or creeping between the skin and flesh, accompanied with tingling,

urning, and insupportable itching, which at times seemed to deprive him of every other idea; to use his own words, he felt "as if in an ant's nest," and at night, or when near the fire, he was constantly obliged to strip himself naked, and rub himself all over with pumice-stone before he could obtain a moment's respite from his sufferings; nor could he divest himself of the idea that those originated from real living insects between the skin and flesh, and he was constantly collecting pieces of indurated cuticle or small crusts, in the belief that they were the offending agents, which idea was somewhat confirmed by the constant appearance of pediculi on his person, notwithstanding his habits of cleanliness, which would seem to render such an occurrence impossible.

The treatment adopted in this case was, in the first instance, to remove all external and internal causes of irritation; consequently, soap, which the patient used freely, was forbidden, and the rough means employed to allay the itching were also interdicted; and as pediculi were said to be present, the parts which suffered most from irritation were to be gently smeared with fresh lard, containing about ten grains of white precipitate of mercury to the ounce, and a few drops of creosote. He also took internally twenty drops of diluted sulphuric acid, combined with ten drops of Battley's sedative liquor, three times a-day. A tepid bath once a-week was at the same time directed to be made use of, and his diet was strictly regulated, and indeed confined to milk, bread, and boiled meat. All these means were steadily persevered in for a fortnight, till October 10th, when he reported himself decidedly better, and consequently there was no alteration advised, save that he should use a warm lotion when the irritation came on, composed of a weak solution of bichloride of mercury in creosote water. At the end of the second fortnight, October 24th, he presented himself with a joyful aspect, stating that he had passed one or two days without irritation, which had never occurred to him for three years previously; yet the opium was disordering his stomach, and destroying his appetite; consequently, it was omitted, and the tincture of the muriate of iron substituted, in a draught of infusion of quassia. This soon appeared to have the desired effect of giving tone to the stomach, and he continued to amend rapidly; yet, at the end of a week, he applied again for the opiate, which, however, was taken at bedtime only, whilst the ointment was discontinued, a small proportion of the bisulphuret of mercury being added to the lotion, as a substitute, and his diet was still restricted. Throughout this patient's attendance at the Institution, there was only an occasional variation in the dose of his medicines, and in the quantity of active ingredients in his lotion and ointment, a gradual increase being necessary.

In one or two instances a slight error in diet brought on a paroxysm, yet his amendment was progressive, so that at the end of November, exactly two months from his first application, he considered himself cured, and brought a donation to the Institution, in token of his gratitude, which he has since continued annually as an assurance that the benefit he obtained has been permanent.

As an example of a case of local prurigo senilis, I will cite the instance of Leonard Cordeux, aged seventy-two, of George-street, Blackfriars-road. This was a case where the anus and scrotum in its posterior parts were affected, constituting the P. podicis of Willan, and the patient had suffered nine years from the malady, when he was admitted on the 28th of July last; he described his annoyance as intense, and that it had gradually increased in severity from its origin to the time of his application, notwithstanding frequent endeavours to obtain relief. This patient had suffered from syphilis in early life, as evidenced by scars in the groins, &c., but his general health was not amiss for his advanced period of life; his circulation was feeble and languid, and his figure attenuated. On examination of the parts affected, there was little evidence of the disease—a harsh, rough state of the surface being all that met the eye; no papulæ were present, or if they had existed, they had been removed by the nails of the patient, and little abrasions occupied their place, there were no symptoms of stricture of the rectum, hemorrhoids, or ascarides. The means recommended for the relief of this patient were mucilaginous hip-baths, daily ablutions with yolk of egg and tepid water, and the application twice a-day of a very diluted mercurial ointment containing a few minims of creosote to the ounce; the diet was regulated as in Loveritt's case, and to stimulate the capillary circulation, and perchance to remove any lurking venereal taint, one-sixth of a grain of bichloride of mercury in cold infusion of hops was taken thrice daily. It was surprising in how short a time these remedies produced a beneficial result on this long-standing malady, for in a week it was apparent; and a continuance of the same plan, with little or no modification for two months, completely restored the patient to health, so that he was discharged cured on the 3rd of October, having, as he assured me, for nine years, every night, so torn and scratched himself, both when waking and asleep, that his linen and fingers were always covered with blood. Many further instances of these pruriginous affections might be readily cited; but I trust sufficient has been advanced to illustrate what I have stated concerning the disease, and therefore, as I have already mentioned, that the species I have called P. internus is for the most part a symptomatic affection, and, when not so, requiring no special treatment. I shall conclude with the announcement that the subject for next week will be PORRIGO—better known as *ringworm* or *scalled head*.

The Structure and Functions of the Brain,

WITH NEW VIEWS ON

THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine, formerly Physician to the Bicêtre and Salpetrière Asylums, Author of the "Traité Medico-Philosophique sur l'Aliénation Mentale," "Medicine Clinique," "Nosographie Philosophique," &c. &c. Translated, with Notes, illustrative of some important Doctrines in Physiology, Phrenology, and Moral Education,

By DR. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopedia of Practical Surgery, &c.

INTERMITTENT LESIONS OF MOTILITY.

Epilepsy, Hysteria.—Epilepsy is an intermittent lesion of motility, characterised by attacks usually frequent and periodical, with fits of sudden loss of consciousness, with partial or general convulsions, stertorous breathing, foam at the mouth, and absence of all recollection of the attack when it is past. The epileptic attack (says Andral) although possessing fundamental characteristics, is not always so like to itself as not to admit of distinctions of form. We recognise three: the great attack; the less attack, with vertigo and stunning; and fits of absence. The first form, or true epileptic attack, whether the patient has had precursory symptoms or not, he falls down unconscious, and sometimes before falling utters a strange and frightful cry. When this cry is not uttered a heavy groan is heard, while at the same time various lesions of motion, sensation, and intellect may be observed. In the first stage we have cadaveric rigidity, in the second convulsions, in the third muscular depression. In the first stage the patient is lying upon his back, his head thrown back, the eyes wide open, presenting a wild appearance and squinting, the mouth widely open, the tongue out, the teeth pressing upon and cutting it, and the upper and lower limbs rigid. This stage lasts but a short time, when convulsions set in. The countenance, till now immoveable, becomes agitated with grimaces caused by muscular force so violent as sometimes to luxate the lower jaw. The limbs are convulsed, five or six shocks in succession are observed in the arms; the convulsions are strongest, however, in the inferior extremities, and have been known to be entirely confined to them. The muscles of the body are also convulsed, and in some cases on one side of the body only. These two stages together may last ten minutes. In the third stage, that of depression, the muscular system, broken by the violent convulsive efforts, falls into relaxation and depression; this third stage may last longer than the other two.

Lesions of Sensation.—During these three stages sensation is completely abolished; the patient may be pricked, torn, or burned, without his experiencing any feeling whatever. The senses of hearing, smell, and sight are also suspended.

Lesions of the Intellect.—These are still more profound; the patient loses all consciousness from the first stage to the middle of the third. When the muscular depression and coma begin to be dissipated, he slowly recovers, and when he looks around him he appears stupid, and utters a few incoherent words. He has but one desire, that of being left to his repose. He then gradually falls asleep, and when he wakes his intellect is restored. The coma sometimes persists for some time; this state is known as the apoplectiform fit of epilepsy. What becomes of the functions of nutrition in this state? The circulation may be disturbed, and is so, whenever the attack has not begun with cerebral congestion. During the rigidity the face is pale, but in the transition from the stage of rigidity to that of convulsion, signs of congestion appear. The face, neck, and sometimes the whole body, become suffused with a violet hue; violent palpitations may occur, and the pulse is usually very frequent.

Lesions of Respiration.—When the attack is fatal, it is through the respiration that it becomes so; in the rigid stage it may be suspended, and to all appearance stopped. During the convulsions it is fitful, unequal, laborious. In the muscular depression it becomes large, free, and sometimes the expiration is accompanied with noise; and it is at this moment that the foaming of the mouth, so characteristic of epilepsy, occurs. Some persons during the attack void their fæces, urine, or semen. The attack may last from one or two minutes to fifteen or twenty. Cases occur in authors which are said to have lasted for hours, days, nay for several days. But this is a mistake. These are a series of attacks, occurring uninterruptedly one after another. How great must be the fatigue from such attacks. Death often happens under such circumstances.

SECOND FORM.

Lesser Attack, with Vertigo and Stunnings.—This form of fits is very curious. It may be said, that these slight attacks usually precede a stronger one. It is difficult to give a general description of them. The patient becomes suddenly unconscious, exhibiting loss of sensation, with rigidity and convulsions; but all these partially and without coma.

THIRD FORM.

Absence of all Recollection.—In this attack the patient stops all at once in what he is doing, and experiences sudden cessation of sensation and intellect, without any lesion of movement. This third form is often merely interpolated between the stronger attacks; all three forms may be intermingled, and the second and third are rarely observed without the first.

Third.—Symptoms after the Attack.—The constant and invariable symptom which must be regarded as characteristic of epilepsy, is the profound oblivion of all that has taken place. The patient has no recollection beyond that of having fainted away. Usually, on recovering, he feels a little fatigue. Sometimes a singular phenomenon occurs, the intellect being more developed and lucid than usual. Sometimes the intellect has been disturbed, and the sensibility modified; in some cases horror of liquids has been observed; in others, certain lesions of motion, tics, casts of the eye, strabismus, hemiplegia. Some present red spots upon the skin, others dots round the eyes and nose. A case is mentioned in which the attack was followed by an abundant hemoptisis.

Phenomena observed between the Fits.—This state of health may be deemed very satisfactory if the fits are rare; but the more frequent they are, the more the general health is altered. It is especially in the intellect that alterations are remarked.

Its *progress* may be divided into that, the return of which is regular, and into that whose return is irregular, as regards frequency. Some have but one fit during life; others, one every year, every month, or every day, and many times a-day. Epilepsy may be suspended during many years. When it is so, we should not say that it is cured for we have seen the fits re-appear after twelve or fifteen years' interruption. There are cases which the fits become more and more strong; others, in which they become more and more feeble; lastly

there are some in which they have alternations of violence and feebleness.

There are certain circumstances which exercise a happy influence on epilepsy. Thus, we have seen it cease by the sole fact of the patient's being taken with intermittent fever. Certain acute diseases act in the same manner. In children, measles and scarlet fever have a happy influence upon the fits. Different diseases of the digestive tube have made them disappear. Pregnancy is sometimes a favourable circumstance, but this is not without exception.

Termination.—Epilepsy may terminate by cure, is most especially frequent in children; the epilepsy passes beyond the age of puberty without being cured, we have much less chances of cure. We have seen children in whom the epilepsy ceased at the age of seven or eight years; re-appearing at puberty. After puberty, the cure is very rare. One of the most remarkable cases of cure is that cited by Tissot, of an individual who remained epileptic till the age of thirty, when the fits ceased suddenly, and never returned, although he lived to an advanced age. In the majority of cases, unfortunately, no cure takes place. When the disease persists, it determines other diseases, and in general it may be said that epileptics do not live long. Some die in the fit.

Treatment.—During the fit we have no means of stopping it; all we have to do is to prevent the patient hurting himself. We must forego the use of the exciting substances commonly employed, and which can only do harm. However, when the fit is prolonged, or very violent, and there is reason to fear that the comatose state may produce apoplexy, we must then act; a vein must be opened to obviate the sanguineous congestion, either during the convulsions (and this is no easy matter) or afterwards.

It is certain that the emission of blood will cause the cessation of the coma. If, after the fit, there be no urgent symptom, the best thing to be done is to allow the patient to sleep; but, on the other hand, if there be any signs of congestion, either of the brain or lungs, we must not hesitate to resort to bleeding. Revulsives, sinapisms may also be employed with advantage; and this is the more important as it is by no means certain that the coma may be dependent on cerebral congestion. In the case of a woman who expired during the epileptic coma, we could not detect the slightest trace of sanguineous congestion; but, on the other hand, there was a very large effusion of serum in the ventricles. Is there anything to be done before the attack? When the epileptic aura is felt, it has been said that we may, by acting on the nervous current, prevent the epileptic attack. I have never been able to discover any instance of such success.

Between Fits.—It is of great importance to attend to the causes that produce the disease, as the treatment must vary accordingly. It is the same in this respect with epilepsy as it is with convulsions. Blisters may be of great use. Morgagni mentions a case cured by this means. Setons, moxas, and cupping at the nucha have also been found useful, as well as the actual and potential cautery. In regard to the actual cautery, although some cases are recorded in which it has been of service, the number far predominates in which it has done harm, having either exasperated the disease, or caused death. Revulsives may be employed on the other parts of the body, and ought not to be applied too near the head. A case is mentioned of a burn on the thigh curing the disease; it gave rise to a tedious and abundant suppuration, but the disease returned as soon as it healed.

Revulsives have been sometimes applied to the spot from which the *aura epileptica* took rise. A person aged forty-six, who had been epileptic for fourteen years, became stupid. The trephine was applied, and the operation was followed by the cure of the epilepsy and the restoration of his intellect. Sometimes, too, the fits have been stopped by the removal of the part from which the *aura* arose, by dividing the radial nerve, and sometimes by removing a tumour.

Baths.—Warm baths are not proper, excepting where they are employed to re-establish a cutaneous eruption; but they should then be accompanied by cold affusions on the head. But neither the tepid nor cold bath have been found useful. Sea bathing of itself has no virtue, but it may be useful from the pleasure of travel which it procures; for although epilepsy is one of the most untractable diseases as regards medical treatment, it cannot be denied that the imagination has great influence, especially in females.

It is a duty to set our faces against such remedies as superstition or charlatanism have proposed.[1] Our treatment should chiefly rest in the choice of rational and hygienic means. An attack may sometimes be prevented by making the patient walk quickly on the first appearance of the symptoms, or, as Pinel recommended, by making the patient smell ammoniacal vapours.

Epileptics ought to lodge on a ground floor, and should be watched by persons to prevent their falling, and to stretch them, either on a bed, or on the floor, so as to protect the head against violent contusions. The bed should be low, somewhat like the camp bed, when several are kept together, a necessity which always proves unfavourable. I am of opinion that one of the chief causes of the incurability at Bicêtre and Salpetriére arises from the crowding of several hundred of these cases into the same dormitories. When the fits occur in the night, great vigilance is necessary: as some of the patients turn their faces against the pillow, and may be suffocated if help be not at hand.

Epilepsy has been distinguished into idiopathic, or cerebral, when the point of departure is in the brain, and symptomatic when it is fixed elsewhere. In the present state of our knowledge, it is impossible not to recognise that epilepsy is always an intermittent affection of the motory fasciculi, and perhaps even of certain sensitive fasciculi of the whole cerebro-spinal axis, and that the starting point of the primitive lesion may thus be on any part of the course of these fasciculi up to the very centre of the brain itself. I have already stated that in injecting with vermillion the brain of persons who had died epileptic, I had found in the base of the brain, in the crura and elsewhere, circumscribed points disseminated through the whole substance, in which the injection did not penetrate as it did in the other parts, thus showing an alteration which would not have been suspected but for the injection; the substance appeared white and consistent, as in the healthy state, yet it must have been altered, as its capillaries were obliterated.

We must acknowledge that the ordinary modes of investigation are wholly insufficient for minute research, which should be carried into every bulb, fasciculus, and plane of the cerebro-spinal axis; here, in fact, is a new world for discovery. Symptomatic epilepsy can only be explained as a reaction on the encephalic nervous centres. The influence of worms, intestinal irritation, disease of the liver, or of the bladder, has been greatly exaggerated; very possibly, in many cases, these diseases have been mere accidental accompaniments occurring in persons predisposed to, or already subject to, epilepsy.

The only powerful, and well-established reaction is that of the genital organs; and masturbation and coition may reach to the height of convulsive exaltation, and degenerate into epileptiform fits. Masturbation especially is a frequent cause of epilepsy. It often happens in epileptics that the intellect becomes disordered after a fit more or less permanently, not being limited to a passing somnolency or stupor, but followed by an attack of blind, furious, automatic mania, that nothing can control. I have seen an imbecile epileptic in this state kill two of his companions with a bar of iron before he could be prevented; these are the most dangerous patients of any.

We find the same encephalic alterations in epilepsy as in chronic mania[2], general paralysis, and all the other chronic lesions of the nervous centres. M.M. Boucher and Cazauveilh refer epilepsy to a chronic inflammation of the white substance of the brain and its membranes, characterised by hyperemia, induration, and softening. M Guislain has met with induration of the olivary bodies in two-thirds of the alienated epileptics whom he has examined. Ferrus has explored the nervous centres in a great number of epileptics; he has almost constantly met with hypertrophy of the brain with induration, polished brightness of the medullary substance, and thickening of the bones of the cranium. In other cases he has pointed out softening of tubercles in the cerebral substance, and hydrocephalus; he regards these alterations as the cause of epilepsy.

Experimental physiology produces almost at will the contraction of certain limbs, by wounding certain parts of the base of the brain; there is then in the mesocephalus a more acute sensibility than in the hemispheres: with such results, is it then difficult to explain epileptic phenomena, and even simple convulsions? Is it difficult to conceive in the brain the influence of the peripheric alterations upon the centres, seeing that the planes and fibrous fasciculi which form these centres traverse and pass to be radiated in all the encephalic mass? As regards epilepsy, as well as general paralysis, the identity of seat, so vainly sought, can only be explained by the lesions of the fasciculi or fibres of certain centres the most irritable in the brain; and hence this lesion may have its seat as well in the spinal marrow, as in the bulb, the protuberance, and cerebellum, or in any other part of the brain. It may depend upon a chronic inflammatory state, a simple chronic irritation, an atrophic or hypertrophic action, an effusion, a tubercle, and lastly, all the lesions slight or profound which are found in the course of these fasciculi or motory and sensitive fibres.

For the same reason, if the lesion is found in a part of the brain, where there are no motory fasciculi, we shall find the cerebral alteration without paralysis or lesion of the motility and sensibility.

[1 Two remedies deserve to be excluded from the charge of charlatanism: the nitrate of silver, which must be used with caution on account of its discolouring the skin when given in large quantities; and the oil of turpentine, which owes its property of distancing, and sometimes curing, the fits, probably to its being in a state of positive electricity, as Professor Faraday has lately shown that it has the power of polarising light. Tr.]

2 [M. Pinel mentions chronic mania, one division at least, much better and more practical than those generally in use, and upon which more may be said hereafter. Tr.]

ORIGINAL CONTRIBUTIONS.

THE CASE OF POISONING AT BROMLEY.

By James William Ilott, Esq.

I was sent for on Tuesday evening, November 7th, 1843, about six o'clock, to examine the body of Harriet Monkton, aged twenty-three, who had been found dead in a privy behind a chapel in Bromley. She had, apparently, died from some convulsive action. The pupils were dilated; tongue clenched firmly between the teeth; lower lip livid, with a small quantity of dark viscid fluid escaping from the mouth. Hands clenched; her right hand was thrown behind her as if she had endeavoured to support herself in her fall. Her left hand was in front of the body, and her handkerchief, a clean white one, was either in it, or between it, and the body. She was in a semi-recumbent position; her right leg was against the door, which was open, and must have been so at the time of her decease. Her left leg was bent under her; the head was leaning forward, hanging down on her chest, with the face towards the door, and away from the seat, which was at her side. The bonnet was bent, but this probably happened in her fall, the place being very small. Her clothes were not disarranged; she had boots on, and did not appear to have walked very far, the mud upon them being principally confined to the soles of the feet. The body was quite cold and stiff, and had probably been dead some hours. I gave directions for her removal to her own house, and was very particular in observing that nothing fell from her at the time. Examined the floor, and the surface of the night soil, but could see no bottle or broken pieces of glass. On making a more careful examination, I found no marks of external violence, but there were clear signs of somewhat advanced pregnancy. From inquiries I made, it appeared that none of her friends had any suspicion of such being the case. She had generally good health, and she had been at home for the last

few weeks. She was in Bromley during the Monday, and was seen by several persons that evening, who all described her as being, if any thing, more cheerful than usual, which they ascribed to her having procured a new situation at Arundel, as teacher in a school. An inquest was held upon the body, and a post-mortem examination was ordered to be made. This I performed on Thursday morning about sixty hours after the supposed time of her death. Very little change had taken place in the body.

Cranium, and its contents.—The membranes of the brain healthy, with no effusion below; the vessels on the surface were rather congested; brain perfectly healthy, with no effusion into the lateral ventricles, or at its base.

Thorax and Abdomen.—On opening the cavity of the abdomen, the impregnated uterus was seen occupying its lower part, the intestines being pushed up by it. It was fancied that there was a smell of prussic acid; there was a small quantity of fluid in the pleuræ, about an ounce and a-half; the lungs were rather congested, with scarcely any adhesions; otherwise healthy; heart about its ordinary size, and healthy; large veins of chest filled with blood. Removed the stomach and œsophagus with their contents for further examination, previously securing each extremity by ligature. The liver, spleen, and kidneys were in a perfectly normal state; pancreas rather congested; lining membrane of the larynx reddened; tongue dry on the surface, firmly clenched between the teeth, and wounded by them; papillæ very distinct. The stomach contained about forty ounces of thickish fluid, with scarcely any solid matter, smelling strongly of prussic acid; collected it in a bottle and corked it. Lining membrane of the œsophagus intensely reddened; plexus of vessels distinct; stomach in various points, but more especially near the œsophagus, inflamed, or congested; the mucous coat somewhat softer than usual, and corrugated. In some portion of the small intestines similar patches were observed, the vessels appearing in an arborescent form, with minute points where ecchymosis had taken place. Healthy fæcal matter in the colon.

Uterus, and its Appendages.—From the general appearances of this organ, and the fœtus (a well-formed male), it may be imagined that she was between five and six months advanced in pregnancy (about six). The ovaria were small; in one a corpus luteum was very evident, in the other a Graafian vesicle was approaching the surface. The bladder was empty, and the vessel at its neck and the upper part of the vagina were much congested; a small quantity of whitish mucus was contained in the vagina, which escaped on a section being made. The os uteri was closed by the gelatinous substance.

Examination of the Contents of the Stomach.—Smell decidedly that of prussic acid. Recognised as such by many persons well acquainted with it, and its presence was clearly demonstrated by all the ordinary chemical tests, which were frequently repeated with just as conclusive results even on the fifth and sixth day after death. It is quite evident that the quantity of the acid taken must have been large, and her death no doubt must have been nearly instantaneous.

Diligent search was made for any vessel that could have contained the poison, and just before the adjourned inquest (November 10th) an ounce and a-half phial was brought me, which had been found in the privy, under the boards where deceased lay, with its neck slanting downwards into the soil. It contained at its bottom, and around its sides, a crystalline substance. This I was requested by the coroner to examine, and to form an opinion whether the bottle was the one that had contained the acid. The phial was encrusted with night soil, more particularly round its neck; it appeared to have been there some time, the soil not easily wiping off. It had no smell whatever of prussic acid. It contained a considerable quantity of a crystalline substance (about one drachm) in a coarsely pulverised state. It likewise contained two small insects about a quarter of an inch in length, belonging to the class Myriapoda, which, on the warmth of the hand being applied, moved freely about; there was no label on the bottle, nor did there appear ever to have been any.

CHEMICAL ANALYSIS.

The salt volatilised before the blow-pipe without any very distinct odour. Collected on a plate of glass suspended over it, in the form of a white powder. In distilled water readily dissolved, solution scarcely acid.

Acetate of lead gave a white precipitate, nitrate of baryta no precipitate; nitrate of silver a copious curdly white precipitate. Hydrochloric acid was therefore indicated.

On mixing quick lime, and applying heat, ammonia was disengaged, recognised, first, by its smell, secondly, by its restoring the colour of reddened litmus paper, and thirdly, by giving white fumes with hydrochloric acid. No effervescence took place on adding hydrochloric acid to the crystals.

The salt, therefore, was the hydrochlorate of ammonia. I subsequently exposed some sal ammoniac to the action of the blow-pipe, and the same results were obtained. Taking all these circumstances into consideration, I came to the conclusion that the phial was not the one that had contained the prussic acid.

At the request of the coroner, I mixed a small quantity (about thirty minims) of hydrocyanic acid with some hydrochlorate of ammonia, in a phial, and let it down in a similar situation, the mouth, however, being upward. At the end of sixty hours there was a decided smell of prussic acid, which disappeared entirely at the end of four days. In the first instance, when the smell remained, I imagined that I should be able to detect it, and to produce the Prussian blue on the addition of the required reagents, but this I was unable to do; and it appeared that this was owing to the ammonia forming some compound with cyanogen. This led to my trying many experiments in conjunction with my friend Mr. Sparkes, whose assistance I beg to acknowledge, of which the following were the results:

1. If hydrocyanic acid, in small quantity, be mixed with ammon. hydrochlor., dissolved in distilled water, and liquor potassæ and solution of the sulphate of iron are added, the usual green precipitate will be formed. This will be wholly taken up on adding hydrochloric acid in excess, and the liquid will become quite clear. It is requisite that there should be an excess of ammonia generated.

2. The same result will be obtained if sulphuric acid be employed instead of the muriatic.

3. If, however, after adding the liquor potassæ and sulphate of iron, the mixture be boiled, so as to get rid entirely of the ammonia, and the hydrochloric or sulphuric acids are added, the Prussian blue will be quite evident. This experiment is very strikingly shown by dividing the liquid in the one case, adding the acid in the other, boiling it first; the first will become quite clear, the second will have the Prussian blue deposited.

From these experiments it appears that the ordinary iron test is insufficient to detect the existence of small quantities of prussic acid in any liquid which contains an excess of ammonia; but if the liquid contain in the first instance no ammonia, and after the addition of liquor potassæ and sulphate of iron, free ammonia be either added or generated by the decomposition of the hydrochloret; sulphuric, or muriatic acids, added in due excess, will produce the usual precipitate of Prussian blue. These facts, which appeared to be new, were communicated at the time to Dr. Christison, and have since been noticed by him in the last edition of his work.

FEBRUARY 18TH, 1846.

Henry Beaumont Leeson, M.D., examined.—Said:—I am a lecturer on chemistry and forensic medicine at St. Thomas' Hospital. I received a bottle yesterday from Mr. James Ilott. It contained about three drachms of a brown viscid liquid. [This was the remaining portion of the contents of the stomach; the bottle in which it was contained, had been kept tightly corked, and excluded from the light since November, 1843.] I washed the bottle out with some pure distilled water, and placed the contents in a glass retort. I then distilled it over in a solution of nitrate of silver. I should state that the liquid possessed no peculiar smell, that it slightly reddened litmus paper, indicating the presence of an acid. After distilling some little time, a white cloud (cyanide of silver) was formed, showing the presence of hydrocyanic acid. I continued the distillation until no further precipitation took place. I then filtered the liquid, collected, dried, and weighed the precipitate. The amount of cyanide of silver thus obtained was 0·345 grains, equivalent to three and a-half grains of medicinal prussic acid (pharmacopœia strength), so that, if the quantity of liquid originally exceeded four ounces, the amount of prussic acid contained therein would, according to this mode of calculation, be about thirty-five grains. No doubt, a considerably larger quantity originally contained in the liquid had become decomposed, as is usually the case when hydrocyanic acid has been kept for some time; indeed I am somewhat astonished that after so long a period any should have been detected in it. After weighing the precipitate, I subsequently examined it by adding pure hydrochloric acid, to separate the hydrocyanic acid, which I then submitted to the usual test of producing Prussian blue, by the addition of liquor potassæ and sulphate of iron. This was requisite to prove that the white precipitate was really cyanide, and not the chloride of silver. I have no doubt, therefore, that a very large quantity of prussic acid, either alone or in combination with some other substance, had been swallowed. Supposing that strong prussic acid had been contained in a small phial, I should certainly not have expected that the deceased would have altogether emptied the phial. The second bottle delivered to me by Mr. James Ilott (this was the one found by Sergeant King, as already mentioned in my evidence) contained a quantity of a crystalline substance, muriate, or hydrochlorate of ammonia, commonly called sal ammoniac; it also contained a very small quantity of muriate of lime, which leaves no doubt whatever in my mind that it had been a bottle of smelling salts, prepared, as is very customary, by adding lime, or lime-water, to sal-ammoniac; this, by uniting with the acid, sets ammonia free. I have here a portion of this crystalline substance, taken out of the phial, to which I have added lime-water, and you will be able to recognise the smell of ammonia. [Handing it to the coroner and jury.] I further examined this substance to see if I could detect anything else that had been contained in the bottle, but found nothing except a little of the soil of the privy. I found no carbonate of lime, or carbonate of ammonia, which might perhaps have been the case, had it ever contained prussic acid: prussic acid, by its decomposition, gives rise to the production of ammonia and carbonic acid. I find no trace whatever therein of any hydrocyanate of ammonia. From the state of the soil on the bottle, and from various other circumstances, I should say that it had been some time in the situation where it was found; that it originally contained lime and sal ammoniac, forming smelling salts; the muriate of lime formed in that case is highly deliquescent, which circumstance, combined with the position of the bottle, would account for most of that substance having escaped leaving the remaining sal ammoniac nearly pure. The existence of living grubs in the phial, as mentioned by Mr. James Ilott, and the circumstances above mentioned, lead me to the general conclusion that the bottle had been there many weeks, perhaps months; that it originally contained smelling salts, and, being no longer useful, had been thrown away. I examined the crystals by the microscope, and made comparative experiments with prussic acid added to a similar mixture of ammoniacal smelling salts; the results were altogether dissimilar. I found no trace of carbonic acid present. In reference to the first bottle, had I acidulated the liquid with sulphuric acid I might probably have obtained a large quantity of prussic acid, but I was anxious to avoid any possible decomposition of muriate of soda, which was probably contained in the stomach. In regard to the ascertainment of the quantity swallowed by the deceased, I may observe that prussic acid passes so rapidly into every part of the body, being diffused by the blood through its substance, that the contents of the stomach would contain only a portion. The blood of dogs poisoned by the acid, which have died instantaneously, when subjected to immediate distillation, yields it in considerable quantity. Ammonia, to a certain extent, may be considered as an antidote to prussic acid.

REVIEWS.

Letter to John Forbes, M.D., on his Article entitled Homœopathy, Allopathy, and Young Physic, contained in the British and Foreign Medical Review, for January, 1846. By WM HENDERSON, M.D., Professor of Pathology in the University of Edinburgh. 8vo. London: 1846. pp. 76.

It is with great grief we find a professor of such a subject as pathology, in such a university as Edinburgh, committing himself to such vagaries as are contained in the doctrines and practice of homœopathy. Dr. Henderson may be insignificant enough in himself for aught we know or care, and if we are to judge of him by the pamphlet before us, which we suppose represents him, there is little doubt about what his intellectual or professional importance is; but the position he holds demands that, at least, he should pay some deference to it, though none may be due to himself. As we have said, we grieve to see a man in whose hands responsibility is invested, toying with its importance as though its treatment were mere child's play. How, whilst indulging the absurdities in question, Dr. Henderson can in anywise discharge the duties becoming a teacher of pathology, is to us a mystery. We cannot for a moment imagine a man teaching correct pathology, and at the same time crediting the doctrines of the homœopathic school. Either Dr. Henderson must rhapsodise to his class in a manner very unworthy the time and attention of mere tyros, or he cannot in his heart believe the nonsense he puts forth in the tract before us. We are quite at a loss how to judge of him—if he were to resign a chair, which as a homœopathist he has no right to hold, we should know for a certainty what sect he belonged to—playing as he does two parts, so utterly dissimilar, we do not regard him as a fair subject for critical consideration. Of him we know nothing, but we cannot help feeling for the fate of the school which has the misfortune to number him amongst her teachers. We should have thought his dismissal from the Royal Infirmary would have prompted him in all honourable manliness to resign his chair also—being declared by his colleagues unfit to fill one situation, personal dignity and decency should have suggested to him instantly to give the other up. But, no! the loaves and fishes were too attractive for him, and he is willing to preach one doctrine, and practise another, according as his purposes may be suited by either. To our mind such conduct is the reverse of creditable. Were Dr. Henderson in a more honourable position than he is, the tissue of nonsense contained in his pamphlet would render it undeserving of anything like serious notice; but believing as we do that its author is perfectly indifferent whether he teach genuine pathology founded upon the facts of morbid action and produce, as acknowledged by one's common senses; or gratify his imagination by speculating in all manner of absurdities about latent causes, symptoms, magical doses, and so forth, we willingly close his book, with the serious intention of hereafter devoting it to the useful purposes of shaving-paper.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Meeting of May 26, 1846.

J. G. PERRY, Esq., Vice-President, in the Chair.

Cases of Melanosis, with Observations. By HOLMES COOTE, ESQ., Fellow of the Royal College of Surgeons. Surgeon to the North London Ophthalmic Institution.

The author, after relating several cases of melanosis, gives a brief historical notice of the works in which a description of the disease is contained. He then observes that "melanosis in the human subject occurs as a primary disease only in the eye and in the skin. In the horse it is seen chiefly about the anus, parotid gland, or spleen. Mr. Spooner, of the Royal Veterinary College, has never met with it but in horses of a light colour, most of them were becoming white from age." After some remarks upon the necessity of not confounding true melanotic tumours with other dark-coloured swellings, the author gives a brief account of the chemical composition, and microscopical anatomy of true melanosis. He argues from the latter, that melanotic tumours, though sparingly if at all supplied with blood vessels, are not unorganised; the cells which compose them having their periods of growth, maturity, and decline. He denies the correctness of regarding melanosis as a variety of cancer. He enumerates many points in which the two diseases essentially differ. Melanosis of the eye commences between the choroid and the retina; the tumour, pushing the contents of the globe on one side, makes its way externally by irregular periods of increase. Melanotic tumours of the skin are either cutaneous or subcutaneous.

The development of internal disease, to which the fatal termination of the case is owing, is marked by general lassitude, and undefined pains over the trunk and limbs. The patient is exhausted by sickness and diarrhœa, but in most cases retains his mental faculties to the last.

Secondary melanotic accumulations are found in all structures except the cornea, synovial membranes, tendons and aponeurotic expansions. The liver often attains an enormous magnitude in one case examined by Mr. Lawrence it weighed seventeen pounds and a-half. From a table of fifteen accurately-watched cases, it would appear that the average duration of life after the removal of the primary disease by operation, does not amount to more than thirteen months. The author concludes by endeavouring to show that the operation, though justifiable for the purpose of relieving a patient from a source of suffering, ought not to be held out as a means of eradicating the disease, or of materially prolonging life. He rests these conclusions very much upon examinations made by himself; having found by the aid of the microscope, that in one case melanotic matter existed in the blood vessels, in apparently healthy muscles, nerves, and other tissues immediately surrounding the primary tumour.

Mr. W. W. Cooper, in allusion to one of the cases mentioned in the paper just read, stated that ever since the operation the patient had been a martyr to dyspepsia. She had become much attenuated, and suffered greatly from pyrosis, and he (Mr. Cooper) feared that although the eye continued well, there was some melanotic disease in the neighbourhood of the digestive organs, in all probability of the stomach.

Mr. Perry remarked, that in the case to which Mr. Cooper referred, the melanosis was situated external to the eye. This he thought a very uncommon seat for the disease, and he inquired of Mr. Cooper if the contents of the tumour had been examined chemically?

Mr. W. W. Cooper in reply stated, that the diseased growth had not been examined chemically, but it had been submitted to examination under the microscope, and presented, he believed, all the characters of melanosis. The disease commenced from a small red point, and was supplied by enlarged vessels running from the canthus. It made rapid progress. Mr. Fergusson had seen the case with him, and had concurred with him in advising the operation, as affording the only chance for its removal. This was accordingly done, and was attended with considerable hemorrhage. Cicatrisation proceeded rapidly, and in a fortnight the eye was, to all appearance, perfectly well. Although during the operation a considerable portion of the conjunctiva covering the cornea was of necessity removed, no opacity resulted.

Mr. Fergusson remembered the case perfectly well, and his impression was that it was clearly one of melanosis. Although he concurred in the opinion that the operation should be performed, he was not sanguine as to the result. He was gratified to find that it had been so far successful, contrary to his expectation, for he had found that when that disease was seated in the eyeball it invariably relapsed, and the case terminated fatally in a longer or shorter period. The first case narrated by Mr. Coote was peculiar in many respects; from the description of the parts that had been removed, it appeared that the portion of the optic nerve which had been extirpated, when seen under the microscope, presented black spots resembling those noticed in other parts of the diseased organ, and he feared that a similar state of disease would obtain in that part of the nerve which still remained in the orbit. He asked Mr. Coote if he had seen this patient since the operation, and he wished further to ask him if he entertained any particular views respecting the term "malignancy" as applicable to those tumours in different parts of the body. As far as he (Mr. Fergusson) understood that word, it was strictly applicable to the disease described by Mr. Coote. It would appear from the average result of a great many cases, that the patients die at the end of thirteen months after the performance of an operation, and they do not in general survive the primary occurrence of the disease for a much longer period. If therefore the term "malignant" be applicable to the ordinary forms of cancer, then it is equally applicable to melanosis.

Mr. H. Coote had not seen the patient in the first case since the operation had been performed, but he had heard that, for some months afterwards, there had been a dark sanious discharge from the orbit; the veins of the palpebræ were enlarged, and the integuments stained of a dark colour, and he (Mr. Coote) was of opinion that if the blood had been examined at that time, it would have been found in a melanotic condition. The examination of the optic nerve under the microscope had been very carefully conducted, and the black spots in its structure alluded to by Mr. Fergusson had been clearly distinguished, and he anticipated, on that account, that the further progress of the case would not be very satisfactory. He understood that there were already signs of enlargement about the liver, and some evidence of a return of the disease in the orbit. With respect to the term "malignancy," he was inclined to apply it far more extensively than was generally done. It was employed principally in reference to cancer, which embraced a great variety of diseases. He (Mr. Coote) did not think that the disease in question (melanosis) was in any way allied to the cancerous maladies, from which it differed in its origin, progress, duration, and termination. Under the head "malignant diseases" he was inclined to include a great many formidable complaints, which were not generally regarded as such.

Dr. T. Thompson, in reference to the remark which had just fallen from the last speaker, that melanosis is not cancer, related the case of a lady, fifty years of age, who had been in ill-health for about twelve months, without presenting any special symptoms of local disease, with the exception of a slight distension of the abdomen. The appetite was good, the bowels open, the urinary secretion natural, and the intellect clear, and she did not suffer any pain, but still there was progressive emaciation. The only guide to the diagnosis was the sallowness of the countenance, and that led to the suspicion that there existed malignant disease, the rapid emaciation that had been going on directing attention to the stomach, liver, or duodenum as its seat. About two months before death a dark spot appeared upon the gums. The patient gradually sunk, and on examining the body after death, the organs generally were found healthy, but the abdominal and visceral peritoneum was covered with a secretion presenting in appearance, colour, and consistence a great resemblance to the pigmentum nigrum of the eye. This black matter could be readily scraped off, and was nowhere thick, except over the cœcum. The omentum presented a similar appearance, and a patch of the same kind was found on the mucous membrane of the duodenum. Neither tubercle nor cancer existed in any part of the body. He mentioned this case as a striking illustration of the disease, and he (Dr. T. Thompson) thought it decidedly malignant. It further served to prove that melanosis did not in every case commence as the primary disease in the eye and skin.

Mr. Lloyd described a case in which melanosis occurred extensively internally, without exhibiting itself externally. The patient first came under notice for obstruction of the rectum, with discharge of blood, to which was soon superadded a profuse discharge from the uterus. On examination ulceration and the presence of excrescences were discovered. The disease was at once regarded as

malignant, and an unfavourable prognosis given. Symptoms of the extension of the disease to the abdomen, and afterwards to the lungs next followed. The dyspnœa was most distressing, and there was a copious expectoration of a dark bloody matter, and also great difficulty in swallowing. Hectic supervened, and the patient sunk. On examination after death, the melanotic disease was found to affect the rectum, uterus, lungs, liver, and intestines, between the coats of which, and also on the mucous membrane, there were small nodules of the disease. The œsophagus presented a puckered appearance, something like scirrhus, but was free from melanosis. The melanotic matter was so abundant, that the diseased parts which were put into other vessels, containing some valuable preparations, so completely stained them, as to render them altogether valueless. With respect to the duration of life after the performance of an operation for the removal of this disease, he (Mr Lloyd) had about eighteen months previously, removed a melanotic tumour from the eyelid, which was encroaching somewhat on the eyeball. After the extirpation had been effected, he cauterised the wound with chloride of zinc. The case was altogether successful, and the tumour presented all the characters of true melanosis.

Mr. C. Hawkins stated that in his opinion those diseases should be called malignant, which, whether removed or not by operation, showed themselves in other organs, and rapidly proved fatal. Melanosis, according to his experience, was at the head of this class; it was generally rapidly fatal after an operation had been performed. He had seen all parts of the body covered with melanotic tumours. The question was not whether the disease were melanosis, cancer, or encephaloid; but whether an operation would afford the patient a prospect of recovery. This was a question that could be decided only by the experience of surgeons. In some semi-malignant diseases, such as scirrhus of the skin, he thought an operation might prevent the occurrence of a relapse.

Mr. Arnott said it was very difficult to decide what diseases are malignant; he thought the definition just given was very suitable, and fully applicable to melanosis; still melanosis was very different from cancer as a malignant disease. The author he thought was in error, when he stated that melanosis always occurred as a primary disease in the skin or eye; experience generally showed the contrary. He (Mr. Arnott) had less hope of escaping a relapse after an operation for melanosis affecting the skin or eye, than in cases of scirrhus, or even of encephaloid disease. He wished to ask Mr. Coote whether he had ever seen a case of melanosis, affecting either of those organs as a primary disease, prove fatal without the occurrence of internal disease, as was occasionally the case in cancer. In the first case described by Mr. Coote, the disease clearly existed in the remains of the optic nerve, and yet the melanosis had not returned in the orbit. It was far otherwise in cases of cancer, in which, when a relapse occurred after an operation, it always showed itself in the orbit. He (Mr. Arnott) then narrated the case of a woman, who laboured under melanosis of the back, which ulcerated. He advised and performed its extirpation; the part appeared to heal kindly, but in about a year or eighteen months the disease relapsed, and the woman's body presented the appearance of that of a mulatto. Every part of the system was infected with the disease.

Mr Perry inquired of Mr. Coote if he had any reason to believe that melanosis was hereditary? He put the question because he was acquainted with a family consisting of four persons, whose mother died twenty years ago of melanosis, and they were all at present perfectly healthy. He had also known an instance of a white horse, which died of the disease, two of the progeny of which, one of them white, had hitherto escaped the disease. He mentioned the colour, because he believed white horses were held to be peculiarly liable to melanosis.

Mr. Coote had no knowledge of any case in which melanosis, while still a primary disease, had proved fatal; it always affected the internal viscera before it caused death. With respect to the cases adduced by Mr. Lloyd and Dr. Thompson, to oppose his opinion that melanosis occurs as a primary disease only in the skin and eye, the principal part affected in those cases was the mucous membrane, and we are not at present fully acquainted with the changes that take place in that tissue, although we know that it bears a great resemblance to the skin. He himself had not met with any case of melanotic disease, in which it had not occurred primarily in the skin and eye. There was not any evidence, he believed, to trace an hereditary origin, but the disease was of too rare occurrence to afford sufficient examples. Mr. Arnott had referred to the first case narrated by him in the paper, in which the disease had been removed by operation, and had afterwards returned in the viscera, the orbit remaining unaffected by the disease. The details of similar cases would be found in the records of veterinary surgery.

Mr. Lloyd alluded to a case which was under his care in St. Bartholomew's Hospital, and which was supposed to be an instance of the carcinoma of the breast, until the skin became melanotic, and the true character of the disease became developed.

Dr. P. A. Stuart begged to correct Mr. Coote's statement that the melanotic disease affected the mucous membrane in the case narrated by Dr. Thompson and Mr. Lloyd. The serous membrane was, in fact, the part principally affected, and in Mr. Lloyd's patient, the melanotic tumours were discovered in the cellular tissue between the coats of the intestines. He wished to ask Mr. Lloyd if the mesenteric glands were diseased?

Mr. Lloyd could not recollect the condition of those glands.

Case of Rupture of the Heart from Fatty Degeneration of that Organ. By R. H. Meade, Esq., F.R.C.S., of Bradford, Yorkshire.

The subject of this case was an old gentleman, aged eighty-eight, very strong and active, and who had walked to church (a distance of half a mile) and back again, on the morning of the day he died. He went to bed, feeling as well as usual; but on the servant taking leave of him, she noticed an unusual appearance in his countenance, and heard him gasp once as if for breath. She immediately called for help, but he never moved or breathed again.

Examination post-mortem.—The lungs were quite healthy; the pericardium covered with much fat, and when opened was found distended with blood, separated into serum and clot, to the amount of a pound. This was found to have proceeded from an irregular jagged opening at the lower and back part of the left ventricle, near the apex of the organ. The muscular texture of the heart around this, was so soft and altered in structure that it would not bear the pressure of the finger. It was of a dirty-yellow colour, and at the first view looked like softened tuberculous matter; but on closer inspection was found to consist of a fatty substance. The lower part of the ventricle, in which the rent had taken place, bulged out so as to form a sort of pouch. The heart presented no other important alterations; but it was generally loaded with fat, and the muscular texture was pale and flabby.

The coats of the aorta, as well as the mitral and aortic valves, were partly ossified, but not to a degree to interfere materially with their action. An interesting question, the author observes, in connection with this case, is—how long the disease had existed before the rupture of the heart occurred, and whether it could have been long present without giving rise to symptoms? He states he was in attendance on the patient two months before his death, for some weeks, when he had cough and complained of weakness, with constant noise in his head and ears. The pulse was full and had a jerking feel; but he did not detect anything unnatural in the sounds or impulse of the heart.

Hydatid Cyst either originating in or pressing upon the Prostate Gland. By George Lowdell, Esq., late House-Surgeon to the Sussex County Hospital.

John Ireland, aged sixty-four, was admitted into hospital, July, 1844. He had experienced difficulty in passing water for three or four years. This difficulty had lately amounted to almost complete retention. The bladder was extremely full, and the patient in severe pain. Several unsuccessful attempts had been made to pass the catheter. The same result attended the first trial after he was admitted. The instrument passed with great facility to the prostatic portion of the urethra, and thence its point diverged into numerous false passages. On examination by the rectum, a large obscurely elastic tumour in the situation of the prostate gland was discovered pressing on the gut, and nearly filling the pelvis. He was ordered a warm bath, which relieved his pain, and enabled him to pass a small quantity of urine. Still his bladder continued very much distended. On a second attempt, a small catheter was passed into the bladder, and three pints of alkaline urine were drawn off. On examination of the abdomen, two small tumours were felt in the direction of the arch of the colon. The patient remained in a state of debility, and died a few days after his admission.

On examination of the body, the peritoneum, in the neighbourhood of the bladder, was found dark, black, and softened. The cellular tissue about its neck, and covering the psoas and iliacus muscles, was boggy and soft. The bladder was much thickened, and in the situation of the prostate was a tumour larger than a fœtal head, which, when cut open, proved to be an hydatid cyst full of hydatids compressed together; the true substance of the prostate being lost in the thickened cyst. The urethra was healthy, but the prostatic portion had been so pressed upon the tumour, that, in attempting to pass the catheter, numerous false passages had been made in every direction. Between the layers of omentum and in close proximity to the arch of the colon, were two tumours containing hydatids within a thickened cyst.

Mr. Curling stated that a patient died in the London Hospital some years since from precisely a similar cause, namely, a large collection of hydatids pressing on the bladder.

Mr. Lloyd considered the case which had just been read as one of very great interest. There was also a point of considerable importance connected with the treatment to which he desired to direct the attention of the Society. He alluded to the formation of numerous false passages, and he could not think any surgeon was justified in using force sufficient to make a false passage, whenever he experienced any difficulty in passing a catheter. No surgeon who is aware of the attendant danger would do so. He (Mr. Lloyd) had seen cases of enlargement of the prostate where the surgeon, in attempting catheterism, had not only failed to pass the catheter into the bladder, but had thrust it through the urethra into the cellular tissue around, and had there given rise to inflammation and suppuration. He thought that the operation of puncturing the bladder above the pubes should have been performed. It would have afforded a greater chance of relieving the patient.

Mr. Fergusson remarked that Mr. Lloyd had mooted a very important question, although he had only reiterated the ordinary principles of surgery. If a catheter cannot be passed by gentle means, the amount of force necessary to make a false passage should certainly not be had recourse to, unless the surgeon had made up his mind to puncture the bladder about the neck, and thus force his way into that viscus.

Mr. Paget had seen the preparation of the morbid parts in the case in question, and there were a number of false passages, not any of which, he felt convinced, was made at the Brighton Hospital. One of these false passages passed directly up in front of the bladder, and into and along it, the instrument had passed, when catheterism was attempted at the Brighton Hospital. He (Mr. Paget) thought the case was so far successful—as far as it went—that the bladder had been emptied, and he was of opinion that if that viscus had been punctured above the pubes, the mischief already existing would have been greatly increased.

Mr. Lloyd explained that his remarks had been intended to apply generally to cases in which false passages were made, and not to the particular case under notice. With respect to puncturing the bladder above the pubis increasing the danger of the case, he could not support such a view, nor would any pupil of Abernethy's say so. He had frequently seen it performed, and had done it

imself, but he had never seen a case in which mischief had resulted from the operation neither peritonitis nor cellular inflammation.

Mr. Prescott Hewett quoted the practice of Sir B. C. Brodie, who in cases of enlarged prostate, punctures the bladder by thrusting the instrument through the middle lobe of the prostate.

TO CORRESPONDENTS.

A Country Practitioner *may try Mr. Forster's System of Book-keeping. It is not unsuited for the accounts of a large general practice.*

Alpha.—*We believe the best form for iodide of iron is the syrup made by adding solution of protrodide of iron to simple syrup, in such proportion for convenience of prescribing that each fluid drachm of syrup may contain one grain of the iodide. We subjoin a formula for its preparation.*

Iodine, 126 *grains*;
Iron filings, 1 *drachm*.

Add about an ounce of distilled water, and occasionally agitate until the colour of iodine disappears add syrup to make 19 *fluid ounces. To the second query—*

Potassii iodidi, 14 *grains*;
Crystallised sulphate of iron, 12 *grains*;
Distilled water, 1 *ounce*.

The solution will contain about 12 *grains of iodide of iron, as required.*

A Constant Reader (Finsbury-square).—*Hoblyn's Dictionary of Medical Terms will answer our correspondent's purpose if he require only an English work. If, on the contrary, he desire a more extended work, containing the medical terms in the principal continental languages, we advise him to obtain Dr. Shirley Palmer's Pentaglot Dictionary of Medical Terms.*

A Well-wisher and Constant Reader's *letter has been unfortunately mislaid. Would our correspondent oblige us with another copy?*

A Poor Sufferer from the Country.—*Mr. Guthrie sees patients from the country at the Westminster Eye Hospital on Mondays, Wednesdays, and Saturdays, at one o'clock.*

M.D., M.R.C.S.—*The purchase of an assistant-surgeoncy in the East India Company's service would be illegal, and would involve both buyer and seller in serious responsibilities.*

Medicus.—*The fee for the degree of M.D. of the University of Glasgow amounts to £26 3s. The next period for graduation will be on the first Wednesday in August.*

M.D.—*We have no doubt that the fellows of the College of Physicians will honourably and indignantly cancel the agreement made by their rulers with certain intriguing politicians belonging to the druggist's body.*

Several communications received will be inserted or returned at our earliest convenience.

The Pharmaceutical Number *of the* Medical Times *for May, is now ready, and contains twenty-four closely-printed pages of the most important matter to the chemist, pharmaceutist, and general practitioner. Price 5d; Stamped 6d. J. A. Carfrae, Essex-street, Strand.*

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THE MEDICAL TIMES.

SATURDAY, JUNE 6, 1846.

"Hot work this, Doctor, ain't it?"—STUKELEY.

The great gossip of the week has been about the weather! "How uncommonly warm it is!" says the first friend you meet in a morning, as he gives for your grasp a hand, that feels something like a lump of flannel fresh rung out in calorified soap-suds. "Bless me, how broiling it is!" says your next communicant, taking off his hat to wipe his forehead, and exposing a face that looks, in its vascular freshness, as if it had just done penance on a gridiron. "Really it is quite melting," says a third, who languidly smiles at you, with a ghastliness suggestive of the idea that its owner has been either frightened or phlebotomised. No such thing! he is a man of weak nerves, and large pores, and the heat easily overcomes him. He has walked about a mile in this meridian temperature, exhaling like a melon bed, and feeling, according to his own expressive phrase, as if he "were going to sink into the earth." Apoplectic old ladies keep quietly in the shade, solacing themselves with soda water, and the cooling services of a fan. Others of them, thinking with Proteus, that—

"One heat another heat expels."

act upon an homœopathic suggestion, and imbibe draughts of hot tea, in anything but homœopathic quantities, thus reaching a fever heat at very little trouble and expense. Their juniors hide their delicate faces under *noli me tangere* sort of gipsey hats, with the laudable object of preserving their laughing eyes and comely complexions from any impertinent visitations of sunshine; and then, spite of all that their medical advisers and discreet mammas say to the contrary, retire into some confectionary lounge, and try to freeze their stomachs by bolting inordinate quantities of ice. A frequent compensation of such indulgence is a smart attack of spasm, lasting indefinitely, and perhaps running into confirmed dyspepsia; a fit of colic, that is liable to return on occasions that render its visit the reverse of welcome; or an unsparing crop of pimples, blushing bountifully over an otherwise pretty face, and likening it to a cauliflower beaming with scarlet fever.

Apropos of ice-eating, and the effects of it—we could relate many pitiable instances in point. In the summer, when that gymnastic absurdity designated the *Polka* was the idle fashion of idle folks, a lady of our acquaintance caught the *furor*, and was well nigh frenzied with it. It was a dancing mania, no doubt of it, and about as definite as that which infested Germany a few centuries ago. The capering itself was of very little consequence, but, unhappily, when heated with this tempestuous exertion, the lady we speak of adopted the plan, summarily cooling herself by swallowing ices without number. The result was a distressing eruption, that disfigured a face handsomer than most people's, and a permanent injury of a constitution that has rarely been surpassed in soundness.

Cases such as this are common enough, and everybody is familiar with them; yet scarcely any of those whom the truth most concerns, care to profit by it until paying the penalty of its transgression.

Nervous, sensitive young gentlemen, who have plenty to live upon and nothing to do, begin to feel alarmed at this sudden and unseasonable approach of dog-days. They regard the canine species with a look of suspicion; and a dog with his tongue out—poor wretch, he may well protrude it, for he has no other part to perspire from—is as anxiously and adroitly avoided, as though he carried a commission to swallow every living comer that dared to oppose him. Newspaper columns are beginning to gape for "horrible occurrences," "melancholy deaths," and "disastrous" somethings, enunciative of dogs becoming unduly eccentric and biting people they had no business with; whilst various functionaries, vested with authority to have "cribbed, cabined, or confined" any itinerant growler, are about issuing edicts against unchecked canine peregrinations. Leading-strings for old maids' lap dogs, and muzzles for the meaner sort, are expected to be in speedy demand.

Hypochondriacs are experiencing an aggravation of disorder, and becoming unusually despairing and disagreeable. All this they impute to the weather, and very properly, for dog-days have been said, time out of mind, to take sad liberties with one's self-complacency. Were we inclined to be learned, and to quote the opinions of authorities that have long since passed away into dust, we could summon a host of names, from Lemnius to Leo Afer, to corroborate everything we have uttered. But the thing is not necessary; in whatever company there is a hypochondriac, and we should like to see the company wherein there was not one, the effects of caloric upon him will be manifest enough.

Maniacs, again, are being seized with fits of extra troublesomeness, all through the weather—and puffing advertisers advise that madmen who want to recover their senses, and sane men who wish to keep as they are, should patronise ventilating gossamers and patent *paletots*, as the only real authorities for laughing at *coup de soleil*.

Editors, again, *et hoc omne genus*, feel desperately the effects of these dog-days. To summon available ideas, and make good use of them, is really no common task in such weather as this. Bob Acres talked of his "courage oozing out of his finger's ends"—it would be no matter of surprise if an editor's thoughts shared a similar fate. Determination to the surface seems the prevailing tendency, and laxity of ideas the order of the day. It may be thought that all this speculation about hot weather and the consequences of it will answer little purpose—it may be so; and yet we cannot help thinking that such a season as we are now suffering from, deserves some notice from those most interested in it. Amongst the many whom it concerns, ourselves—the profession we mean—are not the smallest. Certain we are that a sudden rise of temperature, such as we have lately had, cannot long persist with impunity. During the past week the thermometer has frequently been at 90°, and occasionally as high as 93° in the shade. Already its effects are beginning to be felt in different parts of the country, and we are not without a fear that those effects may soon become serious.

The last four reports of the Registrar General have indicated an unusually healthy condition of the population of this country; and one of the causes assigned has been the absence, for the most part, of inclemency. There has not only been no very severe weather, but there have also been none of those sudden transitions from one extreme temperature to another, which we know, to be one of the most fertile causes of sickness and death. We fear, however, that a continuance of the present weather will considerably alter the

feature in the Mortality Table Report next to be issued. Already it has occurred to us to see the mischief manifesting itself. Common colds are taking the character of influenzas, in the peculiar nervous debility by which they are being characterised. This is easily accounted for, from the state of physical exhaustion which the elevated temperature we live in necessarily produces. Simple inflammatory fevers, that a few weeks ago reached their climax, and passed off with the simplest remedial assistance, are now acquiring a typhoid type, and threatening to be a protracted trouble. It has occurred to us, in our own practice, to find that the depletive and febrifuge plan which answered well enough a week ago, is useless or something worse now; and that nutriment, tonics, and occasional stimulants are being indicated. The pale, flabby, trembling tongue of nervous debility simply, is becoming patched with a brown fur; and sordes spreading on the teeth indicate latent mischief.

In vaccination, again, the influence of the present weather is very striking. Public opportunities, not common, that we have of witnessing the effects of vaccination, have furnished us with some interesting examples during the past week. In many cases, the matter, taken fresh from the pock, has failed to inoculate—in others, the process of infection has been very irregular—too early or too late in maturation—and the pustule itself, unhealthy, and producing pus, ichor, or bloody lymph; in others, again, the secondary fever has been of a typhoid character, and the process of recovery very slow.

Common sore throats, again, are beginning to indicate a tendency to suppuration. Where warm-water gargles answered a short while ago, stimulant, astringent, and detergent ones, are indicated now.

Besides the disposition which ordinary ailments have to take upon themselves a peculiar type, there are others common to hot seasons, that are now manifesting themselves. The characteristic dyspepsia, complicated with bilious derangement, familiar in the tropics, and in this country during severe summer weather, we have seen to prevail during the week past, and find it still on the increase. Gastro-intestinal disturbance, variable in character and severity, is beginning to make its appearance; and we are not unprepared to expect, the present temperature continuing, troublesome bilious fever. At the same time, let us not be unmindful of the liability of cholera to revisit us. At this moment it is desolating certain countries in the east, and we know that in spite of quarantine and every other care, it may spring up in the midst of us, and make thousands its prey. Dysentery has already appeared, and diarrhœa is a feature in everybody's practice. For aught we know, cholera, with its horrible fatality, may come next. It has slumbered for some time, but it is once again prodigal in its work of destruction, and populations are falling before it. This is the season favourable to its severity, and such a one as before gave it a fatal facility on our shores. At the best we meet it almost hopelessly; but at least it becomes us to avoid giving any undue encouragement to it, or to any of the other evils above specified, should we be placed in the way of their visitation. No man can be certain of freedom from the attack of an ailment peculiar to the season or situation in which he lives; but every man can take that invaluable precaution of rendering himself, as far as in his power lies, proof against the invasions of disease, by avoiding the causes which chiefly tend to deteriorate or destroy his health. This is the only safeguard.

When bad men conspire, good men should associate.—BURKE.

THE fantastic figures that are brought into view by the successive turns of the kaleidoscope are not more surprising than the spectacles that are exhibited by the sudden mutations of Medical Reform. As each new combination appears, the eyebrow is lifted in involuntary wonder, and the mind is struck with the stupefaction of amazement. Experience, however, sobers both the mind and the features, and we are enabled, by degrees, to survey the phantasmagorial scene with the same indifference that a reverend brow regards the puerilities of the itinerant punch, or the ineptitudes of the stage clown. As we grow learned in folly we become the master of our emotions. Alas! that the victory should so seldom be worth the cost!

Our stoicism has lately been severely tested by the announcement of an interview between a deputation of the Pharmaceutical Society and the President and Censors of the College of Physicians, during which the President of the College proposed that, in the event of the Chemists and Druggists obtaining an Act of Parliament providing for a Board of Examiners for this trade, a certain number of Physicians should have seats thereon, and thus constitute a Joint Board of Physician-Chemists to license the members to conduct their business as retail dealers in drugs, and the vendors of poisons, perfumery, lozenges, and nostrums.

At the first intimation of such a proposition, we considered it too preposterous to be credited, and we laughed knowingly, as most people do, who fancy that a joke is attempted to be imposed upon their credulity. We were wise above measure—the *Pharmaceutical Journal* contains the discreditable fact, and publishes, to the irrevocable disgrace of the College of Physicians, the unworthy compromise. These are the men who *refused* to sit at a Joint Board with the *General Practitioners*, because they dispensed their own medicines; and now, with the inconsistency of concentrated selfishness, *offer*—aye, OFFER—to form a Joint Board with the Druggists, who are mere *traders* in drugs, and the *mechanics* of the Profession. The stigma of ungovernable, undiscriminating selfishness lies branded on this act of the College.

Corporations have, indeed, no conscience. When an individual loses his fortune he clings with more tenacity to his honour. This, at least, he cannot be deprived of by the act of another, and he is too delicately sensitive to its value to sully it by an act of his own. It would cost a well constituted mind its bitterest pang to stoop to an action that would cast a stain upon its honour—its last possession, and perhaps its only inheritance. It is not thus with corporations.

The General Practitioners have for some years past made immense exertions and many noble sacrifices to emancipate themselves from trade, and have struggled to wipe off the slur which the College of Physicians assiduously, ungenerously, and tauntingly cast at them—of engaging in practices that were derogatory to their professional character. A fox-hunting parson preaching humanity—a debauchee eulogising temperance—a felon inveighing against larceny, or a pimp extolling the meritoriousness of a Lucretia, would call down scarcely less contempt than the College of Physicians have invoked upon themselves by their last act of inconsistency, meanness, and self-abasement. They are willing to sacrifice their high character—their traditional glory—their past memories—their present elevation—their learning—their discipline—and, alas! their honour—for the sake of attracting a few pounds to their coffers, and of arming a body of men against their rivals—the General Practitioners!

The College of Physicians *have ceased* to be the conservators of the professional character; *henceforth* that responsible duty will devolve on the *General Practitioners themselves*. While the General Practitioners are extricating and raising themselves above trade—the Physicians—it grieves us to record the fact—are degrading themselves to embrace it. Amid such a falling off, how grateful the thought that the General Practitioners have, or will have, their "National Institute," and will stand independent of the machinations, and unstained by the meanness of the obsolete colleges! The Druggists are by no means insensible to the importance of their triumph. In a late number of the *Pharmaceutical Journal* this passage occurs—"The Physicians being the 'natural allies' (!) of the Chemists, and being interested in raising the character and position of our body in a pharmaceutical capacity, will not only aid us in the attainment of the desired object, but their co-operation will give increased importance and character to the Board of Examiners and the Institution to which they belong." The self-laudatory spirit in which this sentence is written, borders somewhat on the ludicrous. Really, the Physicians must have sunk very low in public estimation, when the Druggists can openly shake them by the hand, and greet them as "natural allies." A few years since this expression would have been deemed both impertinent and offensive; but relations have greatly changed; and "the toe of the peasant comes so near the heel of the courtier, he galls his kibe," without disgust or remark. This very unnatural alliance can produce nothing but mischief, jealousy, and peril. The Roman wept over Carthage in ruins—the General Practitioners will have to mourn over the decline and fall of the College of Physicians. A speedy shelter within the precincts of the Pharmaceutical Society seems the best thing before them. An alliance between rank in destitution and wealth in ignominy, is perhaps a more *natural* result than we imagined of the present anomalous state of collegeate rule. We hope to be invited to the marriage-breakfast, if merely to give our readers a sketch of the Hogarthian scene.

The claims of the Druggists, however, involve matters far too serious to be lightly-treated. While they are endeavouring to obtain restrictive laws upon the general assumption of their duties as Chemists, and would prevent any man who is not a member of their proposed college, from dispensing the prescription of a Physician, it behoves the General Practitioner to be watchful of his particular interests, and to restrain the Chemists from usurping his especial functions. There are hundreds of Surgeons of England who, at this moment, dispense prescriptions by a sort of implied privilege; and although this bill does not profess to be restrospective in its operation, and confesses to a due respect for the *legal* rights and immunities of the members of the College of Surgeons, yet we know that there are no such legal rights in existence. The members of the College, therefore, who now dispense medicines under the interdict of the Society of Apothecaries, but whose interdict, by disuse, has become a sanction, would by this bill, be exposed to the per-

secution of a new College of Chemists! We may rely upon it that the "tender mercies" of the Apothecaries' Society are a bed of down by comparison with those that will be exercised by the Chemists and Druggists. The Society of Apothecaries, of course cannot and dare not silently allow this bill to pass. It trenches upon their rights; and although, in the proposed bill, regard is at present had to the licentiates of this body; yet a rival jurisdiction, which will assuredly hereafter become the paramount one, cannot be permitted to exist. Let the Society of Apothecaries look to this—and let the members of the College of Surgeons look to it also—*for, by this bill a surgeon would be restricted from making up the prescription of a Physican, even for one of his own patients!* What a scheme laid for the destruction of the General Practitioner and the Physicians! are the consenting parties to the conspiracy! We denounce it, oppose it, and must overthrow it. One portion of the plan is that the Druggists are to undergo a severe examination on various medical topics, which will tend to gratify them for the duties of General Practitioners. Are we to suffer this in the present ambiguous state of medical affairs? *Certainly not.* The Medical Profession must secure by Act of Parliament a sufficient protection from any invasion of their duties, by Druggists or any other parties. A penalty, easily enforced, must be fixed upon each act of medical practice, no matter where, or under what circumstances committed. The *principle* must be determined.

The mode of doing this, hitherto adopted, has often appeared to us incorrect. The penalty should not attach so much to the different acts of attendance on different persons, as to the *successive attendances* on the *same person*. For the *first* attendance, a nominal penalty only might be imposed; but for a *second* attendance, either at home or abroad, a heavy fine, increasing in a due ratio for each subsequent act of attendance, should be fixed. This plan would successfully prevent unqualified practice, while at the same time it would not prohibit a single administration any further than was necessary to affirm the principle of protection. We cannot dilate upon this subject at present for want of space, but will return to it at a future time.

Until, however, the law affecting the General Practitioners is established, it is their duty to oppose, *in toto*, the introduction of any measure into Parliament to elevate the standing of the Druggists. There can be no doubt about this matter. This bill may have some good points, but its bad ones, as relates to the General Practitioners, outweigh all other considerations. The Chemists and Druggists must not steal a march upon us, either from our apathy, incredulity, or false sense of security.

We have done some good in calling attention to the proceedings of Druggists; but we shall not rest until we have reduced their pretensions within reasonable limits, and successfully vindicated the rights of the General Practitioners, and not only their rights, but those of all grades of Physicians and Surgeons which, well-understood, *are the same.*

This will, in future, be a great part of the battle-field of Medical Reform. Defence against pharmaceutical aggression is the question that will much engage the contending forces; and whatever the Druggists may say about the matter, their interests are hostile to ours; and the Physicians, we beg pardon—the *present rulers* of the Physicians— their "*natural allies.*"

In fine, this bill must be opposed *unconditionally*. Half measures, resulting from a pseudo-liberality, will be destructive to our interests. If the Chemists should carry this bill prior to the conclusion of strictly medical legislation, there would be very little chance left for a really useful measure for the General Practitioners. The Chemists would infallibly oppose the demand; and they would be strong enough, backed by the Physicians, to thwart it with success.

On the contrary, when we have gained our *legitimate* objects, we shall not be justified, nor should we desire to embarass the proceedings of the Chemists and Druggists. The bill will, of course, require important modifications before it can be made either beneficial to the public, safe to the General Practitioners, and useful to themselves.

A PURE SURGEON'S SURGERY.

The pure Surgeons of a very impure Council sitting in convenient proximity to the Insolvents' Court in Portugal-street, Lincoln's-inn-fields (to which they are rapidly gravitating) have been very liberal in using the funds of their Institution in publishing to the world how capable they are, and how incapable are all others, of treating cases requiring more than a very ordinary and common-place professional skill. For the ordinary exigencies of surgery an ordinary member—they have publicly advertised it—is not so *very* bad. It is true that the chances are that he is a "felon," a "vendor of quack medicines," a "trader in indecent advertisements," but after all he might possibly, they admit, extract a tooth, or do some ordinary ministration of the kind almost as well as if he had never followed their curricula of study —bore the honour of their examination—or suffered the distinction of paying for their diploma.

Gentlemen so contemptuous in the pride of their pure surgery are no doubt prodigies of surgical skill; and *he* especially who took the lead in these displays of insolent arrogance, and who told the ill-used "members" to their face, in their own Common Hall, that they were worse than unfinished surgeons—"geese"—must be so supremely perfect as a surgeon, that the excluded ought to feel honoured at even getting from him the notice of a scientific flouting. What is, then, Council surgery? What, especially, is the surgery of Mr. Councillor Lawrence? We are at no loss to find out.

In the columns of a medical journal we find the details of a case of strangulated hernia treated of late by Mr. Lawrence, and recently reported by Mr. Holmes Coote. Both gentlemen are "Fellows" of the College. The case may be put forward as conclusive evidence of what one pure surgeon thinks it right to do, and what another pure surgeon thinks it right to applaud. Poor ill-used members may, therefore, expect from the case much to admire, and not less to imitate. Let us then have a look at it, and this the more, since, singularly enough, and with exceedingly good taste, the publication of the case is made the medium for attacking the practice of the surgeon who attended the unfortunate patient before her admission into the hospital, and for sneering at the entire class of General Practitioners by the term "incompetent persons."

The facts of the case to which we allude are briefly as follows:—An aged female, subject to femoral hernia of eight years' standing, which she had always been able to reduce, and for which she had never worn a truss, had the rupture come down, and failed to restore it into the cavity of the belly. On the third day a surgeon was called in, who ineffectually applied the taxis, and the next morning she was admitted into St. Bartholomew's Hospital, where she was not seen by Mr. Lawrence until ten hours had elapsed, at which time the external redness of the sac indicated the occurrence of serious internal mischief, and induced Mr. Lawrence to operate immediately.

An incision about three inches in length was made over the tumour. From this a second incision proceeded from the middle point at right angles, and the two flaps of integument were dissected off. The superficial parts, which were agglutinated together, and infiltrated with pus, covered a smooth, elastic, and dark-coloured tumour, divided into two cavities: the superior and smaller cavity contained some dark-coloured and offensively smelling fluid; the inferior and larger one contained a small quantity of fluid, and a knuckle of small intestine, in great part sphacelated. A wavy line of demarcation separated the dead from the living parts. The edge of the knife was directed inwards, and the stricture divided in several places; the intestinal tube was opened by incision, and the parts were allowed to remain in the wound; no fæcal matter flowed out. The next morning, there not having been any evacuation, an enema was administered per anum, with a slight result. A director was next introduced into the bowel through the wound, and afterwards a female catheter. Next followed the enlarging the wound in the bowel, and the further division of the stricture. The day after Mr. Lawrence, not satisfied at there not having been any evacuation from the wound or rectum, introduced a gum-elastic catheter into the intestinal tube, and the succeeding day the patient died of peritonitis.

The body was examined sixteen hours after death. The peritoneal sac contained a considerable quantity of straw-coloured fluid, mixed with yellow flakes; the intestines, red and vascular, were glued together by recently effused lymph; the small intestines, much dilated, became of a deeper red colour as they approached the cæcum; the protrusion consisted of a portion of ileum, the whole cylinder of which had mortified; the colon was contracted. The catheter had passed fairly into the upper portion of the intestinal tube; the constipation therefore resulted (according to Mr. Holmes Coote) from the cessation of peristaltic action, in consequence of peritonitis.

The operation had liberated the protruded intestine; Gimbernat's and Hey's ligaments had been divided to a small extent in several places. The obturator artery, given off by a common trunk with the epigastric, wound round the upper and inner margin of the femoral ring, close to the inner margin of Gimbernat's ligament, but was uninjured by the knife.

In this case the great and grievous error was committed, of allowing ten hours to elapse after the patient's admission into the hospital, on the fourth day of the strangulation, before she was seen and operated on by Mr. Lawrence, notwithstanding which glaring fact, the reporter severely blames the general practitioner previously in attendance for having allowed twenty-four hours to elapse after his being first called to see his patient, before sending her to the hospital—and adds, "how much must every hour's delay add to the peril of the patient."

In this instance there cannot be the slightest doubt that the charge of delay attaches solely, or almost solely, to the hospital authorities. The patient entered the institution early on Tuesday morning, it being then the fourth day since the

hernia had descended, and the taxis having been ineffectually applied the day before, and yet ten hours were wasted by the persons in surgical charge of her, in trying the effect of an enema, before Mr. Lawrence's assistance was sought for: On his arrival he deemed the case of such importance as to require the immediate performance of an operation, in the course of which he divided the stricture in several places, and, finding a knuckle of intestine strangulated, laid it open by incision.

The intestine being paralysed as well by the protracted strangulation it had undergone, as by the existence of peritonitis, the result was obstinate constipation, to overcome which, in lieu of directing any plan of treatment to remove the existing state of inflammation (the presence of which might have been fairly assumed from the length of time the gut had been strangulated, the sphacelated condition in which it was found, and from the attendant symptoms), there was commenced a series of manipulations calculated, in our opinion, greatly to increase the existing mischief. An enema was exhibited per anum, a director, and then a female catheter passed into the wound in the bowel, the wound itself enlarged, the stricture still further divided, and the next day a gum-elastic catheter was passed into the intestinal tube — no treatment being adopted all this while to combat the peritonitis! God help the poor patient; and yet after this, the reporter expresses surprise that poor people are unwilling to become in-patients in hospitals. What with neglect in the first instance, and over-practice in the second, there appears to be some reason for their hesitation.

We approach now with great reluctance, another portion of our duty, one, however, which we are of necessity compelled to perform.

The reporter of this case, Mr. Holmes Coote, himself till recently a member only of the College of Surgeons, and that, too, not of very long date, being evidently desirous to emulate the example set him by his master, makes, as we before remarked, this case the medium for certain insulting general remarks, and sneers on the whole body of General Practitioners. At the commencement of the report, he states that "a surgeon was called in, who ineffectually applied the taxis," and in the comments which he afterwards makes on the case, he says, "the prejudice which people in indifferent circumstances often entertain against public hospitals, leads then to place themselves in the hands of *incompetent persons*, who give us (!) the opportunity of witnessing the effects of procrastination, and of the injudicious application of the taxis. In the case here related, a portion of small intestine had been protruded and strangulated, with well-marked symptoms; it had subsequently mortified, and inflammation had spread over the whole abdominal cavity, without the trial of one single efficient remedy. After the patient had been examined surgically, and the nature of the case had been understood, four-and-twenty hours were suffered to elapse between the failure of the taxis and the removal of the patient to a hospital."

Every line in this paragraph is to us most painful. It is deeply to be regretted that a young man of skill and talent in his profession, should thus, at the very outset of his career, earn an unenviable notoriety by an uncalled for attack on the professional attainments of men his superiors in standing, and at least his equals in surgical skill. His statements besides are remarkably erroneous and contradictory. He challenges the surgeons who send cases of strangulated hernia to St. Bartholomew's Hospital, as incompetent persons —and in one sense perhaps, they are so, for sending them where illiberal surgeons most do congregate—and he further adds that they afford then the opportunity of witnessing the effects of procrastination, and of the injudicious application of the taxis. That the evils of procrastination in this case, at least, did not depend solely on the general practitioner, is clear by the serious waste of ten hours after the patient's admission into the hospital, at a time, too, when "every hour's delay must add to the peril of the patient;" and furthermore that the taxis was not injudiciously applied, is shown by Mr. Coote's own statement, that the inflammatory reddening of the integuments over the swelling, could not be fairly referred to any undue violence exerted in the efforts made at reduction; it was regarded, at the time, as a manifestation of much more serious mischief in the deeper parts, and dissection confirmed the accuracy of this opinion.

The next unjust and unfounded statement hazarded by Mr. Holmes Coote, is to the effect that mortification of the strangulated intestine was allowed to occur, and inflammation to spread over the whole abdominal cavity without the trial of one efficient remedy. We have called this charge unjust and unfounded, and so it decidedly is; Mr. Coote can only tell from the report of the woman and friends, what was done prior to her admission into the hospital, and even from this account the taxis was fully tried, and cautiously too, as Mr. Coote himself unwittingly proves. That no efficient remedy was used is very clear, for had it been the patient's life would have been saved without hospital interference, and Mr. Coote would not have appeared in the character of an unjust critic and a slanderer. It is, however, far from clear that peritonitis had set in, and spread over the whole abdominal cavity, before the woman became an in-patient in the hospital. The history of the case is rather obscure; but we cannot say that in our opinion evidences of peritonitis existed previously to the operation. That inflammatory action of the peritoneum was then impending, there can be little doubt, but we are not at all inclined to believe that it was not only actually in existence, but very extensive. The whole history of the case, as far as it is recorded, shows the contrary.

The last charge made by Mr. H. Coote against the unfortunate surgeon is that he suffered twenty-four hours to elapse after he had been called in before he sent the patient to the hospital. A most grievous charge, certes, that the surgeon should rely slightly on his own judgment and surgical skill, and seek to relieve the patient, without placing her under the disagreeable necessity of seeking eleemosynary aid and being subjected to exposure, and the performance of a public operation before a number of young men—a position which of itself has operated to our knowledge in repelling many women from the wards of the hospital, although fitting subjects for them, and greatly in need of gratuitous professional assistance.

We say, then, boldly that Mr. H. Coote was quite unjustified in this last charge, as the surgeon in attendance was quite warranted in seeking to relieve his patient himself, and further because the principal delay was afterwards occasioned at the hospital by the gross neglect of the authorities in not sending at once for the surgeon of the week.

MEDICAL SLANDERS.—DR. COSTELLO. WYKE-HOUSE ASYLUM.

We have been disgusted, during the past week, by the perusal, in a weekly journal of a very foolish, a very malignant, and—we need hardly say—a very groundless attack on a distinguished physician, whose communications have frequently ornamented the pages of this journal—we mean Dr. Costello. Moved by a miserable feeling of wounded vanity and personal pique, the journalist in question, after a series of personal conferences and private manœuvres (which will yet be laid bare) gave to the world a statement directed against the management of Wyke-house Asylum, having reference to an inmate of that institution — a gentleman recently editing one of the morning journals. The whole letter consists of certain *hypothetical* assertions of the *insane* patient, which, if really made by him—a matter more than doubtful—are wholly untrue, as will be proved; and it is worthy of remark, that these groundless and absurd statements are placed before the public *professedly* on the authority of a person called the "*wife*" of the patient—an unfortunate female, who long passed as the *wife* of a Mr. M. M—, a gentleman yet living, and subsequently lived as wife, or something of that sort, with the patient, during the existence of the latter's lawful wife. This respectable female, our contemporary's correspondent, was of course, a *worthy* instrument for the exercise of a malice in despair, inflamed to its utmost long ago, and baffled through long months for even a pretence at indulgence. Whether she will prove a *successful* instrument or not will depend on the decision of one of our Courts of Judicature, which will speedily be moved on the subject. If, as we confidently anticipate, the unworthy transaction be proved not only to have had no ground in fact, but to have been hatched by secret meetings and plottings, and to have been but the result of a design frequently and openly expressed to injure, *coute qui coute*, the aspersed individual, it may be expected that the law will exact for it no trifling or unworthy retribution. For ourselves we can authoritatively say in behalf of Dr. Costello, that a self-sacrificing kindness, and a generous friendship were shown to the patient, to an extent excusable only on the ground that he had long been the personal friend of the physician attacked.

DINNER TO R. R. PENNINGTON, ESQ.

The dinner given to Mr. Pennington, the zealous and respected president of the National Association, by the committee of this body, took place on Wednesday last at the Albion Tavern. There was a very large attendance of some of the most respectable members of the profession, all of whom were eager to demonstrate in this public manner their attachment and esteem for a man whose long professional life had been spent in elevating the character of his class, and who now, in the fulness of his age, had lent all the influence of his name and services to the cause in which that class was embarked.

John Nussey, Esq., chairman of the committee, was in the chair, supported on the left by Benjamin Hawes, Esq., M.P. There were also present: The Chisholm of Chisholm, Messrs. Fuller, Clifton, W. Pennington, Geo. Pennington, Propert, Squibb; Dr. Drew; Messrs. Sowten, Dodd, Tegart, Bird, Ancell, Headland, Smith, Hardwicke, Randall, Dermott, Hood, Miles; Dr. Cooke; Messrs. Ross, Dale, Wallace, Vickers, Baker, Colthurst of Bristol, Smith of St. Mary's Cray, Shillito of Brighton, and seventy other gentlemen from the metropolis and provinces.

After the usual toasts had been drank, the chair

man proposed the health of their venerated guest, R. R. Pennington, Esq. The toast was drunk amidst enthusiastic applause.

Mr. Pennington returned thanks in a speech containing many observations of practical value which he had hived in the course of his long experience, and concluded by pledging himself to maintain, with his best ability, the cause of the general practitioners, and, in particular, of the National Association. The respected gentleman then proposed the health of the chairman. Great cheering followed the toast.

The chairman next proposed the health of Benjamin Hawes, Esq., MP., which was drunk with the most cordial approbation. That gentleman returned thanks in an earnest and lucid speech, and reciprocated the compliment by proposing "Prosperity to the National Association."

Mr. Clifton then, by consent of the chairman, proposed the hon. secretaries, and descanted in an impressive manner on the justice of the cause of the general practitioners, on their imperative claims to legislative independence—adducing, as an evidence of the talent and worth of the general practitioners, the high excellence of the recent medical periodical literature which represented them—this being always the sure mirror of the mind of the class for whom and by whom it is written. The toast was received with acclamation, and was responded to by the hon. secretary with much earnestness and ability.

Mr. Fuller proposed the Society of Apothecaries, and recounted their numerous claims on the gratitude of the profession. Mr. Wheeler responded. The utmost cordiality prevailed during the evening, and several of the speakers dwelt with satisfaction on the establishment of the National Institute as a means of binding together the general practitioners, and keeping alive that friendly feeling of which this meeting was so brilliant a record.

After several other toasts had been given the company broke up at a late hour.

GOSSIP OF THE WEEK.

Apothecaries' Hall.—Gentlemen admitted Licentiates on the 28th of May, 1846: Edward Palmer Turner, Coleman Burnham, Owen Kiernan, of Mullingar, William Abraham Salmon, Octavian Royle, John Climenson Day, John James Rygate, Frederick Howard, Frederick Giles Broxholm, Edward Henry Owen, Robert Lumb, James John Roughton.

We regret to announce that Dr. Tuke, for whose life no serious apprehensions were at first entertained, died on the 25th of May, from the progress of erysipelas, consequent upon the injuries inflicted on the head.

Dr. Stephens, Ballyshannon, has been unanimously elected medical superintendent of the Kinlough Dispensary, Ballyshannon.

Obituary. -Recently in his 79th year, the Baron Barbier, formerly principal surgeon and professor at the Val de Grace, member of the Academy of Medicine, and Knight of the Legion of Honour.

Mr. Cæsar Hawkins, surgeon to St. George's Hospital, has been unanimously elected a member of the Council of the College of Surgeons in the vacancy occasioned by the death of the late Mr John Scott.

Royal College of Surgeons.—The following gentlemen were admitted members on Friday, May 29th.—Messrs. E. W. Pritchard, S. Probyn, H. S. Smith, G. A. Jeffery, D. W. Stephens, J. W. Considine, F. J. Sandford, E. Sandford, H. Loney, C. F. Williams, and A. Clark.

Bath United Hospital.—Mr. Cardew has just been elected one of the physicians to this Institution to fill the vacancy occasioned by the resignation of Dr. Braley.

Provincial Medical and Surgical Association.—The anniversary meeting of this Institution will be held at Norwich, on Wednesday and Thursday, August 19th and 20th.

The mayor of Lyons has issued orders to prevent the affixing of announcements of quacks and quack medicines on the dead walls of the city. Similar measures have been adopted at Montpellier.

M. Peixto, a physician at Rio Janeiro, has, it is said, succeeded in curing several lepers by the cautious employment of guano internally and externally.

M. de Lessefs, French consul at Barcelona, reports that a case of yellow fever, presumed to be derived from the Cape de Verd Islands, has occurred in that city.

We have already stated that the cholera has reappeared in several provinces of Persia, in the principal towns of which it has committed great ravages. It has spread from Bokhara to Herat and Meschio, and afterwards passed to the south of the Caspian to Geheran and Ispahan. Recent news from Odessa states that it has traversed the Russian territory, and has appeared at Tiflis, thence passing to the north of the Caspian and Black seas. On the other hand, it has broken out suddenly at Orenburg, in the mines of the Ural mountains; it has also crossed the Volga, and shown itself at the Cascau. It has followed a very irregular course, passing from the west to the south, and not following the course of rivers as it did in the great epidemic of 1828 to 1832. It is further added that this fearful disease has broken out in the Russian army engaged in the Caucasus.

The Westminster Hospital.—This unfortunate institution has been again the scene of dissention. Mr. Hale Thomson, having to operate on a man, in whom a piece of bougie had been broken in the bladder forming the nucleus of a calculus, obtained the assistance of Mr. Liston, passing by his own surgical colleagues altogether. On this a complaint was founded, and the matter was brought before the weekly board on Tuesday last, when a resolution was passed in general terms, to the effect that in future no surgeon foreign to the institution should be allowed to assist one of the hospital surgeons during any operation.

A parliamentary document recently published respecting the library of the British Museum, states that in the natural sciences the library has much that is of value, but much more is still wanting in this department to make it what it ought to be; and the same may be said of medicine and surgery. In the report on the present condition of the library, presented by Mr. Panizzi, under the sectional head "Natural Sciences," it is stated that, the collection of Sir Hans Sloane contained many rare and curious works on natural sciences. The Moll collection also seems to have been rich in works of this class; but a splendid and far more important addition was made by the bequest of Sir Joseph Banks. The royal library contains some remarkable and fine volumes on the same subjects, but, as it was not the king's intention to form a scientific collection, the selection was limited by bibliographical taste, rather than by scientific importance; with regard to medical and chirurgical works, and to the branches of art connected with their practice and technicalities, the royal library may be said to present almost a blank. The Banksian collection alone being nearly perfect as to the natural sciences, it has been thought of importance by the trustees and their officers, ever since that collection was transferred to the British Museum, to apply considerable sums towards the keeping it complete, and the increasing it by the purchase of those new works of the same class, which have been published during the last thirty years, in such large numbers and at such high prices. Among the large additions made to this class, a remarkably handsome volume on sea-weeds (Algæ), by Lutke, and published in Russian, at St. Petersburgh, deserves to be particularly mentioned. In the section headed "Medicine" it is remarked that the importance of the medical schools in London, particularly of late years, and since the establishment of the University of London, has been considered a sufficient cause for buying largely important foreign works, however expensive, so as to afford to the teachers the means of imparting the knowledge of recent discoveries and of the latest improvements, and to the students the means of profiting by the instructions of their teachers. Nevertheless, the Museum Library, even in this branch, does not stand so high as it ought. With respect to English works, the catalogue of the library of the Royal College of Surgeons has been taken as the basis for grounding an opinion. Out of 120 works and 50 editions by 14 mostly contemporary, eminent, medical men, the library is found to possess 61 works and 11 editions. The Royal College of Surgeons, also, is known to spend about £1,200 a-year in the purchase of books on medicine and on natural history from one book seller. The British Museum does not lay out above the half that sum in works of the same description; and even this is more than a fair proportion of the usual annual grant. It is, therefore, evident that numerous important works in medical science must by this time be deficient, and that the deficiency will increase if more efficient means are not taken to provide against it.

Dr. Mainhard of St. Petersburgh has, it is stated, recently examined the body of a woman, in whom he could not discover any traces of the spleen or the splenic vessels.

Among the gentlemen recently proposed as foreign corresponding members of the Royal Academy of Medicine, at Paris, are, Dr. Bartlett, of Maryland; Bischoff, at Giessen; Blasius, at Halle; Dr. Bright, of London; Callisen, at Copenhagen; Ehrenberg, at Berlin; Gaëtani-Bey, at Cairo; Dr. Gerhard, at Philadelphia; Hyrthl, at Vienna; Jacobi, at Bonn; Sir James Clark, of London; Kilian, at Bonn; Poli, at Milan; Rokitansky, at Vienna; Roux, at St. Petersburgh; Dr. Stokes, of Dublin; Valentin, at Zurich; and Dr. Walshe, of London. The greater part of the gentlemen, whose names we have recorded, are fully deserving the proposed honour; but there are some few whose names we have omitted in the list, and who have been recommended as eligible candidates, of whom it may be said, like most of the honorary fellows of the College of Surgeons, their sole qualification must be exceeding interest with the powers that be. Unwilling to act invidiously, we shall refrain from alluding personally to those whose want of qualification we thus indicate, but we must express a hope that the high honours conferrable by the profession in France will be justly awarded, and not prostituted by being bestowed on persons who, if not absolutely unworthy thereof, have yet shown themselves anything but worthy by the position they have taken in the profession, and by their exertions in the cause of science. Membership of the Royal Academy of Medicine ought not to be attainable by private friendship or by personal interest, but solely as the reward for undeviating and untiring devotion to science.

MORTALITY TABLE,

For the week ending May 30, 1846.

Causes of Death	Total.	Average of 5 summers	Average of 5 years
All Causes . . .	835	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	126	162	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	91	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	144	155	157
Diseases of the Lungs, and of the other Organs of Respiration	279	271	294
Diseases of the Heart and Blood-vessels . . .	41	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	72	65	72
Diseases of the Kidneys, &c.	13	7	7
Childbirth, Diseases of the Uterus, &c.	13	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	9	6	7
Diseases of the Skin, Cellular Tissues, &c.	...	1	2
Old Age	20	60	67
Violence, Privation, Cold, and Intemperance . .	23	25	26

No. 350. SUMMARY JUNE 13.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of 1st June, 1846; M. MATHIEU in the Chair.

CHEMISTRY AND PHYSIOLOGY—RESEARCHES ON THE BLOOD, by PROFESSOR DUMAS, Dean of the Faculty of Sciences, Professor at the School of Medicine, &c.

In the blood are contained three organic elements, essential to its nature and to the accomplishment of its functions These are fibrin, albumen, and the component matter of the globules The importance of the part assigned to each has for many years directed towards them the special attention of chemists and of physiologists. Fibrin is easily separated by beating the blood with a small rod on its escape from the vein, and spontaneous coagulation readily furnishes the albumen. It is not so easy a matter to obtain the globules completely free from either fibrin or albumen. Of late, however, a new method has been pointed out by Berzelius, professed by Müller, and has permitted MM. Lecanu and Figuier to realise the complete separation of the pure globules. This method is completely founded upon a modification of the blood, caused by the nature of the filter through which it is passed. Thus, if blood deprived of its fibrin be thrown on a silver-paper filter, the globules pass through the paper in a great measure, colouring deeply the fluid, and a small portion of altered discs remains on the filter If, however, before filtering, the blood be mixed with three or four times its volume of a saturated solution of sulphate of soda, the fluid passes perfectly colourless, and the operation proceeding with rapidity, the pure globules are obtained in a satisfactory state of integrity.

This plan is not, however, without its difficulties, and they are worthy of attention on account of the light they throw upon the nature of the globules, and upon their physiological functions. If defibrinated blood, preserved for a few hours, be operated upon in the above manner, even after an exaggerated addition of sulphate of soda, the liquid is always coloured; whence we may infer that the blood should be thus treated immediately after venesection and defibrination. It should be strained through fine linen, and received into the solution of sulphate of soda previous to filtration, which will then be successful. In order to wash the globules, and to remove from them the albumen, which would conceal their characters, they must be further submitted to the passage of a fresh quantity of the solution of sulphate of soda—an operation invariably followed by serious injury to the globules, which are carried away, lacerated, and otherwise modified. After many researches, M. Dumas has discovered in the corpuscles a remarkable property, which has permitted him to overcome this difficulty. So long as the globules are in contact with air, or aerated water—so long as they remain in an arterial condition—the solution containing them passes colourless through the filtering-paper, and leaves them on its surface; but the filtered liquid becomes immediately coloured, when the globules assume the dark hue characteristic of venous blood. In order to keep the globules in an arterial condition throughout the process, M. Dumas uses a narrow tube, by which a continuous and rapid stream of air is circulated through the liquid. Under these various circumstances the corpuscles conduct themselves exactly after the manner of living bodies capable of resisting the solvent power of the sulphate of soda, so long as their life persists, but yielding to that power when, by privation of air, they become, as it were, asphyxiated—a condition evidenced by their dark colour, and the speediness of their dissolution The efforts of the chemist should, therefore, be directed towards the preservation of vitality in the blood-discs, by agitation, constant ventilation, and the maintenance of their temperature at its normal standard. Thus, in a few hours, the pure globules may be obtained, provided no more than five or six grammes be prepared at a time. This speedy alteration of the corpuscles deprived of air, the energy with which the superficial globules absorb oxygen, thus depriving the inferior layers from the benefits of arterialisation, are circumstances replete with interest. We find in all the researches on respiration that the blood has been looked upon as a homogeneous fluid, placed in the lungs in contact with the air, by which it is modified. Without calling into question the share of the serum in the phenomena of respiration, Professor Dumas considers the globules as so many distinct vesicles, endowed with the powers of individual respiration, the effects of which, combined with the aeration of the serum, constitute the complex function of respiration. Leaving aside for a moment the special action on the serum, it may therefore be said that, in superior animals, that great function has chiefly for its object to furnish oxygen to the blood-discs, and to expel the substances into which they are transformed. Hence, if the effects of respiration be made the object of calculation, we must take into account the envelopes of the globules. Experiment has shown that the faculty of acquiring the bright scarlet colour of arterial blood belongs specially to the corpuscles, and is perfectly independent of the presence of fibrin, albumen, and even of the vital action of the animal; but if sulphate of soda does not deprive the blood of this property, it is not so with other alkaline preparations. Phosphate of soda, and the double tartrate of potass and soda, do not impair this remarkable property; but common salt, and the chloride of potass, when mixed with recently extracted blood, prevent it from acquiring the arterial colour by ventilation. The same assertion applies also to sal ammoniac. It is probable that some connection might be traced between these chemical phenomena and the part which salt meat is supposed to have in the production of scurvy, and also the noxious influence of ammoniacal preparations. By these researches the learned chemist is led to think that the colouring matter of the blood is particularly well disposed to acquire the characteristic hue of arterialisation, when it is united to the globules. Its characters are changed or lost, when, by the alteration or destruction of the corpuscles, the colouring matter becomes dissolved. The salts containing organic acids, such as tartaric and citric acids, are less liable to destroy the integrity of the corpuscles than the salts formed by mineral acids, and the compounds of soda less than those of potass or ammonia. It appears consequently that an unexpected link exists between the integrity of the globules, the arterial state of the blood, the phenomena of respiration, and the nature of the salts dissolved in the circulating fluid. A few experiments of this kind must convince the observer that asphyxia may be produced in the midst of oxygen or atmospheric air, without any apparent change in the function of respiration, by the mere introduction of some particular salts into the blood. The elementary analysis of the blood corpuscles has furnished the following numerical results:—

GLOBULES.

	Women.		Dogs.			Rabbits.
Carbon......	55·1	...	55·1	55·4	...	55.1
Hydrogen..	7·1	...	7·2	7·1	...	7·1
Nitrogen...	17·2	...	17·3	17·3	...	17·5
Oxygen.	20·6	...	20·4	20·2	...	21·3
	100·0		100·0	100·0		101·0

In another communication it is Professor Dumas's intention to examine if the component matter of the globules can be confounded with albumen or casein, or if it should be distinguished from these two substances, as well as from albumen.

SUCCESSFUL TREATMENT OF FARCY, BY M. D'HERAN, M.D.—Since the year 1840 no less than 123 fatal cases of this disease have been recorded in man; 79 have been observed in France, 27 in England, and 17 in Germany. The extreme importance of the treatment of the disorder in horses need not, therefore, be insisted upon. It is a subject which of late has attracted much attention, and M. Garnier, a veterinary surgeon of Lyons, is said to have discovered an unfailing method of treatment. He has not, however, thought proper to publish his method, and to the scientific world at least it must remain for the present unprofitable. M. d'Héran was struck with a remark he heard from a nightman, that during twenty-five years he had never seen a horse employed in that business affected with glanders or farcy. This remark naturally led to the exhibition of sulphur, which M. d'Heran employed, conjointly with M. Gagnage, in the cases of six horses evidently infected with the severest form of the malady. The treatment consisted in local applications, as well as internal medicines. The horses were placed in a sulphureous atmosphere, and four or five times a-day a solution of pyrolignate of iron was injected into the nasal fossæ. The belly was covered with clothes impregnated with a solution of sulphuret of lime, and embrocations of the same liquid were performed all over the body. Internally, a mixture of one pound of honey, two ounces of olive oil, and an ounce and

a-half of sulphur, was exhibited, and aloetic enemata were thrown into the intestine every second day. At each meal the food was plentifully besprinkled with common salt, and a bottle of red wine was given every day, with a view of improving the appetite. All the horses did well.

ACADEMY OF MEDICINE.

Meeting of June 2nd, 1846; Dr. Roche in the Chair.

The Plague and Quarantine Question.

(Continued from page 125.)

M. Hamont read a long discourse, of which the following is an abstract:—"The labours of the commission have left unanswered the chief questions of the subject. The causes of the plague being now known, it becomes the duty of the Academy to demand their suppression, and to inform France and Europe how civilised nations should interfere in order to purify the Delta. In any locality, the first obligation devolving upon the physicians called upon to treat an epidemic is to detect its causes, and to point them out to the competent authorities, in order that they may be destroyed. Such is the part which the Academy has to perform. The Academy is the medical adviser of all humanity in the present case, and that learned body should obtain from Europe the desiccation of the infected source from which springs the plague. It is a duty which must not be shrunk from. Egypt at the present day has only a shadow of an army; the fleet, an useless creation, rots in the harbour of Alexandria. In full peace, Egypt might easily enforce those much wished for rules of public hygiene which would for ever destroy the scourge. To attain this object, why should not France—why should not Europe interfere? When, on a late occasion, a province was an object of debate between a vassal prince and the sultan, the fire of war was near being kindled throughout Europe, but four powers interfered, and a treaty was signed. Is not the plague—that monstrous offspring of the Delta—a threat of perpetual warfare from a corner of the world to the entire world? Is it not death constantly hovering over the native and foreign populations? In the former case, a mere commercial interest was in question; in the latter, the life of nations is at stake, and calls much more loudly for interference. The political balance of Europe prevents any country from going to war without the consent of others. What we ask for is merely that the laws which bind civilised nations should be further extended, and that it should no longer be permitted to one kingdom to compromise voluntarily the health, well-being, and existence of others." In conclusion, M. Hamont demanded: 1, That all ships coming from Egypt be furnished with a foul bill of health; 2, that a quarantine of fifteen days, including the passage, be obligatory for all vessels coming direct from Egypt; 3, that in case of the plague or a suspicious disease appearing on board, the limitation of the quarantine be left to the discretion of the medical authorities of the port.

M. Gaultier de Claubry could not admit with the commission the existence of two sorts of plague—one epidemic, the other sporadic—any more than he could find any difference, except in intensity, between the various intermittent fevers observed in a marshy district. The lancinating pains said to exist in the scars of pestilential buboes, and to denote the approach of the epidemical constitution of the atmosphere, could hardly be allowed to have any importance, when it was recollected that such pains were frequently experienced in the scars of the buboes, under the simple influence of change of weather, or even error of diet. The object of the foregoing remarks was to show that no practical deductions whatever could be drawn from the distinction of two sorts of plague. The report consequently formally proposed that all ships, no matter what be the nature of their bill of health, should, if they had a case of plague on board, be obliged to undergo quarantine. The duration of the incubation (eight days) might, in M. G. de Claubry's opinion, serve as a basis for all sanitary regulations. He would propose ten days of quarantine, including the passage, and, if a case of plague had existed on board, ten days from the date of arrival

M. Bousquet.—"What is the cause of the plague? How is the disease propagated?" Such were the two great questions which the commission had endeavoured to solve. With regard to the first, M. Bousquet was of opinion that the assertions of the report were purely conjectural. An alluvial soil, marshy emanations, a hot and humid atmosphere, badly ventilated dwellings, did not generate the plague; for they were all united in countries where no pestilence had ever been known, and these alleged causes being permanent, the plague should also be permanent in Egypt, which was not observed. The report stated that diseases fly before civilisation. M. Bousquet would ask which? Was it typhus, ague, yellow fever, cholera, consumption, measles, or small-pox? Had we not seen the plague in all the capitals of civilised Europe; and was it not unknown to the savage and to the Indian? Until such time as efficient methods of annihilating the evil in its source should have been discovered, it was prudent to seek for the best means of arresting its progress, and for this purpose it was necessary to inquire into its mode of propagation. If a pestiferous patient communicated to M. B. his complaint, it was evident that something containing the plague "in posse" would be passed from him to M. B; that something would be a true germ, which struck him directly if he touched the body of the sick man, and which was brought to him by the air, if he did not. Contagion, therefore, does not only carry with it the notion of transmission, but also conveys the idea of a germ—a seed—an ovum elaborated by a diseased body, and we find that all contagious maladies produce, before disappearing, a germ capable of reproducing them. M. B. would say that such was the most rational view of the doctrine of contagion. To limit the qualifications of contagion to those maladies only which are transmitted by contact, was to assert that small-pox was and was not contagious; it was so when propagated by touch; it was not contagious when conveyed through the medium of atmospheric air. It was in vain that the commission had endeavoured to show that the plague was merely epidemic. All the characters of the most completely contagious disorders were found in it. Thus an epidemic began with several patients at a time; a contagious malady always struck one patient only at first, and to that patient might in many instances be traced the propagation of the scourge. Another distinctive character was this, in an epidemic the only chance of safety was in flight; in a contagion, on the contrary, the absence of communication with diseased persons insured immunity. Was the plague inoculable? The commission hesitated to answer doubt was often a sign of wisdom; but M. B. might say with Fénélon, that "to doubt when we should believe is as great an error as to believe when we ought to remain in doubt." From what he had read on the plague and other matters, it had always remained upon his mind that the plague had been sometimes inoculated with success; but the facts he had not been able to find again. They were not, after all, very important, because they were ancient, and the commission appeared to believe only in modern cases. In 1801 Dussay inoculated the malady to fourteen persons, who all took it. These experiments were treated with contempt, and are said not to be sufficiently authentic. Did the commission mean that Dussay uttered a false assertion? Dussay died of the plague in 1835, and his memory might be insulted with impunity; but were he to join this meeting suddenly, would anyone dare to say to his face, that he had not done what he asserted he had done? that he had not seen what he stated he had seen? The same experiments were repeated in 1835 before M.M. Clot, Bulard, Fourcaud, Gaëtan, Hammond, and others. None of the horses who were first operated upon had all the symptoms of the plague; but three criminals, condemned to capital punishment, were inoculated, and two caught the disorder. Cases of inoculation were rare it was true, because they were not without peril, and because the art of inoculating diseases had rules and principles which experimentalists did not always observe. But the commission had a ready answer for all cases: if the inoculation failed it was said to be impossible; if it succeeded it was said to prove nothing, because it was performed in a centre of infection. To this he might simply answer that when it was the custom to inoculate small-pox, nobody ever thought of saying that the disorder had resulted from epidemic influence, and not from the operation. As to transmission by contact, it was not so easily demonstrated. The commission declared that contact was not dangerous, and drew the examples of immunity from the plague of 1835, during which the physicians escaped, forgetting that Dr. Rigaud died, that nineteen of the twenty pupils of the School of Abouzabel died victims of the malady, and that during a plague those persons who remained isolated, and avoided contact, were almost all preserved, although they continued to breathe the same air with the infected persons. Was the plague communicable through the agency of articles of dress? This question reminded M. B. of an answer made by a celebrated writer—"I do not know it, but I assert it." It would be indeed extraordinary if the pestilential miasmata had the property of being disseminated in the air, without being able to attach themselves to substances so porous as linen, cotton, or worsted. A case of transmission by clothing was recorded by Grassi, two others by Gaëtani Bey. M. B. must, therefore, differ from the commission not only in admitting propagation by contact, but also through clothes and merchandise. The reporter had stated that the incubation never lasted more than eight days; but we find occasionally in small-pox, and in vaccine, that the incubation lasts longer than its usual period. Why should the same assertion not hold good for the plague? Lastly, the reporter had said that even if a few cases of plague were imported, they would not produce an epidemic. This belief was not to be trusted. The history of small-pox denied it; small-pox was not a disease of European origin, it was a foreigner, but it had, it must be acknowledged, well earned its letters of naturalisation.

Meeting adjourned at half-past five.

SOCIETY OF SURGERY.

M. Monod in the Chair.

Hydatic Cysts of the Wrist.—M. Robert admitted lately into hospital a woman who had for five years suffered from a cyst of the wrist. Having recently experienced a fall, the tumour was considerably bruised, and became inflamed in consequence of the injury. M. Robert made an incision above the annular ligament, and another below it, and extracted from the tumour a large number of granular ovoid substances, which Dupuytren considered to be hydatids, which M. Velpeau looks upon as fibrinous deposits, resulting from ancient hemorrhage, and M.M. Rayer and Mandl believe to be organised substances endowed with life. The tumour was after operation submitted to continuous irrigation, and speedily cured. M. Chassaignac recorded a case of the same kind, in which a complete cure followed puncture with a trocar and the injection of iodine.

Fracture of the Inferior Extremity of the Humerus, and Dislocation of the Elbow (new diagnostic sign).—This sign, observed by M. Malgaigne, consists in the difference of aspect of the bend of the elbow in the two affections. In both a swelling is observed in that region; due, in case of fracture, to the protrusion of the inferior extremity of the upper fragment; in case of dislocation, to the protrusion of the articular surface of the humerus in front of the fore-arm. In the first instance the swelling will be found above, in the second below the bend of the elbow.

Case of Superfœtation—(From the *Gazette Medico-Chirurgicale*).—C. F. L., aged thirty-two, tall, thin, and well formed; had never borne any children. She had menstruated with tolerable regularity up to the month of June, 1845, when the menses were suppressed. In August they returned twice, at a fortnight's interval—a circumstance which removed all idea of pregnancy. Vomiting and sickness appeared, with other more positive signs, which obliged her medical attendant to return to his former opinion of her state. On the 28th of February, she was delivered, after a slow labour, protracted by premature rupture of the membranes, of a full grown, but still-born, female child. Nine hours after accouchement she experienced the sensation of some organ descending through the vagina. The midwife, summoned in haste, found a second fœtus, aged four months and a-half, or five

months, furnished with a cord, placenta, and a complete set of membranes. This was also a femal fœtus.

HOTEL DIEU.

Puerperal Fever, Recovery—by M. Louis—(See p. 411, vol. xiii).—A. D. was admitted into hospital on the 17th March, 1846; her constitution presented decidedly lymphatic characters, and she had menstruated for the last time on the 11th of June, 1845. On the 18th of March she was confined, after fifteen hours' labour, of a healthy female child. Immediately after delivery the patient had a slight rigor, but did well in every other respect, until the second day after her confinement, when she complained of a sensation of cold about the head, giddiness, and violent abdominal pain. Pressure of the hypogastric region was followed by acute suffering, and the womb could not be distinctly felt by palpation. The breasts were large and hard; the bowels very much confined; urine had been voided once only since delivery; skin hot and moist; pulse strong, 120; no sickness. Thirty leeches were applied to the abdomen, and a grain of opium given in a mixture. On the 21st, the uterus was ascertained to be still uncontracted, and to rise as high as the umbilicus. The bowels remaining confined, an ounce of castor-oil was exhibited, and a drachm of nitre in her drink. The next day the uterus had not yet contracted, and the tongue being foul, half a drachm of ipecacuanha was given in four doses. The condition of the patient was gradually improving, except with regard to the womb, which remained inert and dilated up to the 25th, when twenty grains of ergot of rye were administered four days in succession with the most satisfactory result. The patient left the hospital on the 11th of April.

LA PITIE.

Traumatic Tetanus—Death; by Dr. Gosselin. A lad, aged sixteen, was admitted into hospital for a severe contusion of the right foot, over which the wheel of a heavy cart had passed. On admission the two last toes were cold and numbed, and on the dorsal aspect of the foot a soft fluctuating tumour was present, due to the deep contusion of the subcutaneous textures. Two days after the injury the toes were cold and insensible, and a broad eschar had formed on the back of the foot. Considerable swelling and inflammation were present in the lower part of the leg; and in order to prevent the progress of the gangrene, two long and deep incisions were performed on the dorsal aspect of the foot, and two smaller ones at the lower regions of the leg. On examination next morning, June 1, the patient was found better; his tongue was clean, and he showed it without the least difficulty, but the gangrene had gained ground. At eleven o'clock, a.m., M. Gosselin was informed that the patient could neither drink nor open his mouth. The head was drawn backwards, and could not be bent forwards by any voluntary effort. The nape was the seat of a painful sensation. The jaws were firmly, though not completely, closed, the tip of the tongue only being visible between the teeth. Respiration was difficult, the ribs taking part only in the deepest inspiratory efforts; the abdomen was depressed. Venesection; infusion of arnica; vapour baths for one hour. In the evening the trismus and opisthotonos not increased. The patient could drink, but only with caution, and very slowly; pulse 100; skin warm. At nine o'clock, p.m., the vapour-bath was repeated. At eleven o'clock, violent fit of trismus, and increase of the opisthotonos; rigidity of the legs and arms; death at a quarter to twelve. On dissection, the lungs, heart, and brain, were found very much congested, and also the superficial veins of the spinal cord; and at the upper part of the medulla spinalis, in front, a greyish colour extending to a surface of two inches, was noticed on the pia mater.

Dan M'Carthy, D. M. P.

Professor Giacomini, of Padua, has been elected corresponding member of the Royal Academy of Medicine, Paris.

Spain.

ANATOMICO-PATHOLOGICAL OBSERVATIONS UPON PHTHISIS.

By D. José Seco Baldor.

(Continued from page 169.)

Case 13.—*Phthisical Constitution. Hæmoptysis suppressed; recurring after the Lapse of Two Years. Death. Pulmonary Apoplexy; No Tubercles.*

A soldier, tall, slender, with dark complexion, thick neck, narrow thorax, flaccid muscles, and indifferently fed, was, June 5th, 1837, admitted into the Military Hospital of Saint Isabel. He stated that his mother had died from (an affection of) the chest; and that, two years before, in consequence of having walked six leagues in four hours, he had been seized with cough and spitting of blood, oppression in the chest, and tickling in the throat. He was, then, twice bled; employed some other remedies; and recovered. Of this attack, he had suffered no recurrence until the evening of his admission into the hospital; when, having run a considerable distance to be in time for evening parade, he again threw up blood, and experienced all the symptoms which characterized the first attack.

June 5.—The symptoms were: febrile rigors, headach, taste of blood in the mouth; sense of prickling or titillation in the throat, and of gravative pain in the breast, great dyspnœa, cough, expectoration of bright and frothy blood to the amount of half a pound, from the time of admission till the evening-visit; pulse frequent, full and soft; skin hot; countenance pale and dejected; loss of appetite, thirst; mucous *râle* in anterior part of both sides. Neither percussion of the thorax, nor auscultation of the different regions, was attempted, from fear of provoking the hæmorrhage.

Prescription.—Abstinence: vegetable lemonade,[1] with gum, for beverage; sulphuric lemonade, in small doses, every two hours. Blood-letting, of twelve ounces: sinapisms to the lower limbs: silence and repose.

6.—Morning.—Hæmoptysis recurred more profusely, without other alteration. Another blood-letting, of twelve ounces. Evening: Continued to expectorate blood in small quantities. Twelve leeches to the lower part of the throat, above the clavicles.

7.—About one pint of blood again expectorated: pulse very quick and small: headach gone. Blood-letting, of eight ounces.

8.—Respiration relieved: *râle* diminished pulse less frequent. Discharge of blood, in small quantities, mingled with mucus, from the air-passages. Cataplasms, of pure mustard, to lower limbs.

9.—Another attack of profuse hæmorrhage. Dyspnœa great: mucous *râle* very perceptible; respiration extinct in the anterior part of thorax: sound dull. Four cupping-glasses to mammary regions; blisters to the calves; hot bricks to the feet. An astringent mixture; cold vegetable lemonade; portions of snow administered at times. Evening: Another attack of hæmorrhage, less profuse: countenance pale; pulse small, weak, and very frequent; skin cool. Two blisters to the thighs.

10.—Dyspnœa extreme: the *râle* of death: pulse almost imperceptible: countenance destitute of expression. Died at 6, p. m.

NECROTOMY, FOURTEEN HOURS AFTER DEATH.

Trachea and bronchia, full of blood. Lungs of a deep-red colour. Greater part of their parenchyma simply gorged with blood: but some portions, particularly of the right lung, indurated, and resembling spleen in structure. Pulmonary vessels much injected with black blood. Black coagula in the right cavities of the heart. No other lesion in this organ, pericardium, or pleura. No tubercle within, or external to, the pulmonary parenchyma.

REFLECTIONS.

Here is a subject predisposed to pulmonary phthisis: and of this, he would certainly have died, had he been able to withstand the shock of the hæmoptysis. There existed, in him, not one solitary tubercle or germ of phthisis. Had Laennec, with the knowledge that the patient's mother died from pulmonary disease, observed his constitution, and witnessed the attack of hæmorrhage, he would not have hesitated to pronounce the man phthsical, and to regard the hæmoptysis as the first signal of the existence of tubercles in a nascent or embryo state, in the lungs: and in this, he would have egregiously erred; since no tubercle was discovered after the most diligent search. Yet is he generally right, as shewn by the following case, in the assertion that when hæmoptysis attacks a subject predisposed to phthisis, there are ordinarily tubercles in the lungs. This case, moreover, incontestibly proves that hæmoptysis, if not so frequently as has been believed, the cause of the disease, does sometimes precede phthisis.

Case 14.—*Phthisis. Fatal Hæmoptysis. Tubercles and Caverns. Pulmonary Apoplexy.*

In the middle of December, 1836, a serjeant of the guards was admitted into the Hospital of Saint Isabel, in the second stage of pulmonary phthisis. He had suffered sometime from the disease, and sustained an attack of profuse hæmoptysis. The quantity of blood thrown up, was calculated to be at least one pint. A second terrible attack occurred on the third day from his admission; and, on December 21st, a third. He died at one, p. m., of the 22nd.

NECROTOMY AT HALF-PAST 8, A. M., OF 23RD.

Both lungs of a flesh colour, and absolutely soaked in blood. In the left, some nascent tubercles. Both tubercles and caverns, in the right; with complete obstruction and induration of greater part of the parenchyma. Tracheo-bronchial mucous membrane loaded with blood.

REFLECTIONS.

In this case, the hæmoptysis was unquestionably the result of phthisis, or, at least, formed one of its characteristic phenomena. Repeatedly interrogated on the subject, the patient invariably stated that, until within a few days of his admission into the hospital, he had never evacuated blood by the mouth. He had then cough, expectoration of muco-purulent fluid, dyspnœa, slow fever, and incipient marasmus.

The lesions, discovered in the dead body, clearly demonstrated the date of the disease, and its pre-existence with respect to the hæmorrhage; which carried off the patient before the tubercles had been sufficiently developed to destroy life.

Here, a genuine pulmonary apoplexy existed, conjointly with tubercles; contrary to the opinion of Laennec, who believes that the hæmoptysis of the phthisical is almost invariably slight and bronchial, and the hæmorrhage proceeding from pulmonary apoplexy, large and independent on tubercles.

It is, also, worthy of note that there were here no apoplectic portions or centres, hard, and distinctly circumscribed by surrounding healthy structure; but that the whole was equally soddened, without the sanguineous abscesses of which Laennec speaks; and which, undoubtedly, sometimes occur.

Case 15.—*General Inflammation of the Gastro-intestinal Mucous Membrane: Ulcers in the large Intestines: Chronic Peritonitis. Tubercles, without other Lesion, in the Peritonæum and Lungs.*

July 13th, 1836, there died, in the Military Hospital of Lavapies, a young man who complained only of diarrhœa. He had neither fever nor abdominal pains. His appetite continued good till the evening of his death; and he was little emaciated. For the last few days, he had coughed: and, shortly before dissolution, his appetite had declined, and profuse diarrhœa set in. He conversed rationally with the nurses, during the night; and died at two in the morning of the 15th, without a struggle.

NECROTOMY, AT 8 O'CLOCK, A. M., OF 16TH.

Abdomen.—Intestines adhering together, and to the abdominal parietes, liver, and gall-bladder: stomach also united with the liver and diaphragm: in fact,

[1] The vegetable lemonade, *limonada vegetal*, of the Spanish, is the common lemonade, of English domestic economy. The dry, *L. seca*, consists of citric or tartaric acid, reduced to powder, in admixture with sugar. The nitric, sulphuric, and tartaric lemonades, *L. nitrica*, *sulfurica*, *tartarica*, are, respectively, the nitric and sulphuric acid diluted with, and the tartaric acid dissolved in, a large quantity of water. See Hurtado, *Vocabulario Medico-Quirurgico*, Art., *Limonada*.—P

all the portions of the peritoneum glued together. Colour of the membrane ash-grey, with divers dusky spots; and the whole, including the parts which corresponded to the gall and urinary bladder, sprinkled over with tubercles, of moderate consistence and yellowish-white colour. They existed only in the peritoneal covering, and did not penetrate the parenchyma of the viscera which it invests.

The mucous membrane of stomach and duodenum exhibited a pale-red colour upon a cinereous ground. That of the other two small intestines simply injected, in little more than its superior half. In the inferior portion, livid spots and ulcers; some of them, of an oval figure like those which occur in typhoid fever, with the follicles greatly developed. These spots and ulcers were continued into the large intestine; increasing in size and number as they approached the rectum, where they were largest. Also, in these intestines, three oval depressions, like those seen in endonenteritis. Whole canal, from stomach to rectum, containing a thick yellow fluid. Liver and kidneys, of a livid, and, in some parts, dusky hue. Whole abdomen exhaling a most offensive odour.

Thorax.—Lungs sound, and pervious (to the air), with no more congestion than that ordinarily observed in their posterior part, from position of the body. In their parenchyma, some miliary tubercles, of the same colour and consistence as those in the peritonæum. Some of the bronchial glands yellow and tuberculous. Bronchial membrane healthy.

REFLECTIONS.

This patient died from inflammation of the gastro-intestinal mucous membrane and peritoneum. The tubercles were, undoubtedly, posterior in date to, and the effect of, the peritonitis. But those, existing in the pulmonary parenchyma, appear to have been developed without previous or concomitant inflammation, solely in consequence of a tubercular diathesis; sometimes innate, but probably, in this instance, resulting from the alteration produced in the whole system, and principally in the blood, by the two attacks of phlegmasia.

The lungs were the point to which the tubercular diathesis had, in the first place, been attracted. Had the patient lived longer, other structures would have become successively tuberculated.

The dry and infrequent cough, observed towards the close of life, first marked the existence of pulmonary tubercles. This is not strange; considering the paucity and small size of the tubercles, and the otherwise sound condition of both lungs.

CASE 16.—*Constitutional Phthisis: Acute Pleurisy. Tubercles; Caverns: Hæmorrhage into the left Pleura.*

A serjeant of artillery, tall, with thick neck, and narrow chest, was admitted into the Hospital of Saint Isabel, December 3rd, 1836. He had been, some time, unwell, and, for four months, seriously ill, with decided symptoms of pulmonary phthisis.

Morning of 3rd, acute pain in left side; great dyspnœa; convulsions; syncope; inability to lie down. These symptoms principally came on during the night of the 4th. Death, on the night of 5th.

NECROTOMY ON MORNING OF 6TH.

Both lungs intimately adherent, by their vertex, to the ribs: full of tubercles and caverns, particularly the left, and perfectly impervious to the air, in their superior lobes. In the left lung, a cavern opening into the pleura which contained a little thick and pseudo-membranous pus, and three or four ounces of fluid blood. Pleura injected, and red, in places.

Right lung larger than the left between which and the ribs, at the lower part, a considerable vacancy existed. The body did not exhibit great emaciation.

REFLECTIONS.

In this case, the tubercles were undoubtedly, constitutional, and the cause of the partial chronic pleurisy indicated by adhesion of the vertex of both lungs, and the collection of pseudo-membranous pus in the left pleura. Cases of phthisis, in which adhesions, and other traces of chronic pleurisy, do not exist, are of rare occurrence: and the opinion of Laennec would have been correct, if, instead of asserting that, in these instances, the pleurisy is invariably consecutive to the tubercles, he had conceded that sometimes the pleurisy is primitive, and an occasional cause of the latter. The blood, effused into the left pleura, apparently from the open cavern, excited the acute pleurisy by which the patient was so rapidly destroyed.

The cavity which existed between the ribs and the left lung, in the lower region, deserves notice This is, in fact, one of the cases wherein the sound of the thoracic parietes remains clear, although the lung be condensed, and completely impervious to the air.

From the period of this patient's admission, great dyspnœa existed: a condition principally dependent on the circumstance that the two superior pulmonary lobes were unfitted for the respiratory process. It is well known that, in pneumonia, the dyspnœa is much greater when the inflammation implicates the superior, rather than the inferior, lobes. And it may be naturally inferred that the same result will be seen in other cases of pulmonary obstruction.

(To be continued.)

Holland and Denmark.

ON THE OPERATION OF COD'S-LIVER OIL —OLEUM JECORIS ASELLI,—AS A THERAPEUTIC AGENT.

As the employment of this oil in pulmonary phthisis, and divers other grave and intractable diseases, is a subject upon which the minds of professional men, in this country, have been, for some time past, anxiously directed, we have deemed it right to collect a few facts and observations bearing on this important topic, from the writings of our continental brethren. For obvious reasons, our materials have been drawn from sources very little known, if at all accessible, to the great body of British practitioners.—P.

Cod's-liver oil—oleum jecoris, seu jecinoris, aselli, oleum morrhuæ, of the *Latin*,—huile de morue, ou huile de foie de poisson, of the *French*, Bergleberthran, Stockfischleberfett,—Oel, oder—Thran, of the *German*, and Levertraan, of the *Dutch*, is extracted, principally at Berg, in Norway, from the liver of the common cod-fish, *morrhua vulgaris*, olim, *gadus morrhua*; of the coalfish, *merlangus carbonarius*; and ling, *lota molva*. It possesses stimulant and demulcent properties; and operates upon the skin, kidneys, intestinal canal, and liver, and, by virtue of the iodine which it contains, on the whole urinary apparatus and sero-fibrous membranes. It has been long known as a popular remedy in divers maladies; and was introduced into public notice by Schenk, through the medium of *Hufeland's Journal*, in the year 1822. Dr. Shirley Palmer, in Art. *Grausse*, of his *Pentaglot Dictionary*, particularizes it, as entitled to "especial notice." It is employed, with reputed success, in Germany and Holland—1. Against chronic rheumatism and arthritic pains, with gout-stones, nodes, rigidity of the joints, paralysis, neuralgia, nervo-rheumatic sciatica, and "hereditary predisposition to fatal hæmorrhagies." 2. Against scrofula, and rachitis, arthrocace, spina ventosa; scrofulous caries with atrophy: yet avails it nothing in scrofulous diseases of the skin, ophthalmia, and otitis; although, externally, it is of use in cases, where the eye-lids, and lacrymal organs, are the seats of disease 3. Against tubercles of the lungs, in which the process of softening has not yet commenced 4. Against chronic diseases of the skin, herpes, scabies, and mercurial eczema. (In these cases, the brown cod's-liver oil—oleum morrhuæ fuscum seu empyreumaticum - brune Levertraan, of the *Dutch*, and more efficacious than the common oil,—should be given internally, to the amount of six or eight table-spoonfuls daily, and employed, externally, in frictions. The cure will ordinarily be accomplished in from six to ten weeks; and will be accelerated by a nutritious diet from which, acids, fat and salted meats, and alcoholic liquors, are excluded.) 5. Against Ascarides, when used in injections; and against tumours of the female breast. And, 6. Against chronic conjunctivitis and pannus, resulting from dyscrasia. By the administration of from two to five table-spoonfuls of the oil every day, both the condition of the eye, and the constitution, will be greatly improved: and the recovery of the former will be expedited by the external employment of a mixture of two grains of extract of belladonna with one drachm of tincture of opium.

Such is the evidence of the latest German and Dutch medical lexicographers in favour of the new remedy: and the names, and writings, of many of the most celebrated physicians of the continent are brought forward as vouchers for its correctness. The cod's-liver oil is a remedy exceedingly offensive both to the taste and smell. The following, supplied by the Dutch Dictionary of Pharmacology,[1] from which the preceding observations have been borrowed, is the most elegant, and least obnoxious, formula for its exhibition, which we have yet met with:—

R. Olei morrhuæ,
Syrupi corticis aurantii,
Aquæ anisi, singulorum, ℥j;
Olei calami (aromatici) guttas iij,
Acaciæ gummi, ʒij misceantur. Sumatur cochleare amplum ter quotidie.

The following directions respecting the administration of the cod's-liver oil are transcribed from an admirable French pharmacological work of modern date.[2] "It (the oil) is administered to adults, in doses of one table-spoonful;—to children, of one teaspoonful, three or four times a-day. As it frequently causes unpleasant eructations, the mouth should be rinsed, and a small quantity of stale bread be masticated, or some spirituous or aromatic liquid be swallowed, immediately after it. For children, it is frequently combined with carbonate of potash, and some essential oil. It is also, although more rarely, employed, in triple or quadruple doses, in the shape of liniment or glyster."

These observations will not be inaptly concluded by the transcription, from a late number of Professor Otto's admirably conducted *Danish Journal*,[3] of the following case of

CURE OF PHTHISIS BY COD'S-LIVER OIL.—A woman, aged twenty-four, who had menstruated five months, and was born of healthy parents, had always enjoyed excellent health until attacked, in the month of May, with a severe cold. The result was a short, dry, tickling cough, invariably aggravated towards morning; dyspnœa increased by motion, and violent palpitations of the heart. To these was shortly added remittent fever; which bade defiance to all treatment, and was succeeded by other symptoms. The cough increased; and was accompanied by muco-purulent expectoration, and the whole train of hectic phenomena. The condition of the patient grew continually worse, until the 1st of October, when she was visited by the author, Dr. Madvig. Extreme weakness and emaciation, with profuse night-sweats, puriform expectoration, clear, red, and minutely spotted tongue, were the symptoms, then exhibited. The bowels were constipated; urine covered with a shining pellicle: pulse 130. On percussion and auscultation, a cavern was discovered beneath the left clavicle. the sound beneath the right, was somewhat obscure, with slightly bronchial respiration. The pulsation of the heart was greatly extended. All other treatment having failed, a trial of the cod's-liver oil, in doses of half an ounce four times a-day, was determined on. Previously, however, an emetic, of ipecacuanha, was administered. A blister, also, was applied beneath each clavicle, and long kept open by dressing with antimonial ointment the employment of moxa, proposed by the physician, having been rejected by the patient. Her state, in the month of June, was the following Cough and night-perspirations completely gone; strength and flesh returning. In fact, she felt completely well; although her pulse continued to be 100 On examination of the thorax, no trace of the cavern could be detected; but the respiratory murmur, in the situation formerly occupied by it, was very faint. Beneath the right clavicle, a somewhat dull sound was still heard, on percussion, and respiration continued slightly bronchial. The patient was now put upon a milk-diet; had an issue inserted in each

[1] *Encyclopedisch Woordenboek der Praktische Geneesmiddelleer, &c.* Door Dr. G. F. Most, Te Amsterdam, 1844.

[2] *Dictionnaire Universel de Matière Médicale, Tome Troisième,* Art. *Gadus.*

[3] *Bibliothek for Laeger.* No. I. 1844.

arm; and exhibits, in the author's opinion, at least, an example of the cure of confirmed pulmonary phthisis by the use of cod's-liver oil.

America.

Dr. J. Mason Warren, one of the surgeons of the Massachusetts General Hospital, relates, in the *American Journal of Medical Sciences*, an interesting case of erectile tumour, for which both carotids were ligatured with considerable success. The patient, aged twenty-three, consulted Dr. Warren in October, 1815, for an enormous tumour of the lower lip and tongue which had supervened on a mark occupying nearly the whole of the left side of the face and neck. This mark had been originally less extensive and lighter coloured. The lower lip was much enlarged, everted, and gave three aspects: externally, the thick tumefied lip; internally, a fungoid tumour, covered by red granulations distended by blood, as if ready to break through; the whole surmounted by an irregular ulceration with thickened edges and a hardened base. The red, granular appearance extended underneath the tongue through the ranular space to the inferior surface itself, the left half of which was enlarged to double its natural size and partially protruded between the teeth; its upper part being the seat of five or six small ulcerations. The discoloration of the face also extended on the outside of the lip downwards over the chin and neck, covering a space of seven or eight inches in diameter; the whole, especially that on the face, being rather more full and distended with blood than natural. The mark was, of course, congenital, and about four years before the patient's application to Dr. Warren, the lip and tongue first began to swell gradually, and the former very soon ulcerated. The ulceration healed occasionally till within the last year, when it commenced permanently to enlarge. By pressure on the lip the blood could be gradually expelled, but it returned again as soon as the pressure was withdrawn. The same occurred in the tongue. The discoloration of the face had become more marked, and had extended since the development of the erectile tumour in the lip—the character of which it evidently shared. Dr. Warren feared first a cancerous degeneration of the tumour in the lip; and secondly, alarming hemorrhage, and he proposed, after consultation:—1st, to have the left carotid artery tied; 2nd, after a considerable interval of time to tie the right carotid; 3rd, to attack whatever portion of the tumour remained by means calculated to produce contraction of the vessels and obliteration of the erectile tissue. The patient consented, and on the 5th of October the left carotid artery was tied. From this operation the patient recovered, and in about ten days the face had become paler, the erectile tissue and large tumour had much lessened, and the ulceration was healing rapidly. The patient went into the country for three weeks, applying compresses to the swelling wetted with a strong solution of sulphate of zinc.

On the 7th of November, when he returned from the country, the tumour of the lip had diminished one half; the fulness of the face and neck was less, and the discoloured parts were much paler. The tongue was less in size, and the ulcerated spots had quite healed, his health was good; compression of the right carotid artery produced no inconvenience, Dr. Warren therefore determined to place a ligature on it, and the patient being placed in a sitting posture, the carotid artery was laid bare, and a ligature passed under it. It was dilated about one-third more than its natural size. He was then placed on his bed, with the head slightly elevated; the state of the pulse was now explored, and found to be 80 in the minute. The ligature was drawn tight. At first he exhibited no change, but shortly after the pulse appeared to labour, and became slightly irregular; the only symptom noticed in the patient was that he became drowsy. After waiting about fifteen minutes the second knot was tied, and the wound dressed. No inconvenience was experienced from this operation, farther than a slight faintness during the afternoon on attempting to raise his head. Slight soreness about the larynx occurred about the third day, and went off about the sixth. In ten days the patient was able to go down stairs, the face being paler and the morbid appearances diminishing.

On the 26th of November the ulceration of the lip had quite healed, but the lip itself was thick and everted by erectile tissue. Dr. Warren, therefore, determined to remove the greater part of the under lip by a V shaped incision. In order to prevent the occurrence of hemorrhage, a cataract-needle was plunged into the vascular texture on the left side, and carried in different directions, so as to break up and destroy its organisation. No hemorrhage followed this application. Three days afterwards a similar operation was repeated on the right side.

On November 29th a strong compression being exercised by means of two steel forceps prepared for the purpose, on each side of the lip, so as completely to interrupt the course of blood into it, a portion not less than two inches in length at its free edge was removed by a triangular incision. At first there was not the slightest hemorrhage, the two lips of the wound remaining perfectly dry; on the compression being removed, however, blood gradually oozed from the whole cut surface. This was easily checked, and the edges of the wound approximated by a number of points of the uninterrupted suture, and a powerful compressing bandage applied. For the first twenty-four hours he was carefully watched. Towards evening a coagulum was found projecting from the wound, which was removed. From this time there was no farther hemorrhage, or bad symptom, and the wound healed by the first intention. The portion of lip removed presented a spongy tissue, like the body of a leech, and gave a sensation in cutting like a bit of diseased lung—parts of it were indurated from the previous subcutaneous incisions. The muscular tissue had almost completely disappeared.

On December 12th the patient returned home quite well. The discoloration of the face had become much paler, and that of the neck and chest had almost wholly disappeared. The ear had lost its swollen and deep reddish colour, and had become of a natural size and of a pale aspect. No pulsation could be discovered in either of the temporal arteries, or, in fact, in any of the arteries of the head. In the neck, just above the clavicle, two large arteries nearly the size of the carotids, were seen pulsating powerfully under the skin, being in all probability the supra-scapular arteries greatly enlarged. Dr Warren heard from the patient on February 1st, nearly four months from the first operation, when he was in perfect health and without the slightest symptom of disturbance of the brain from the great interruption which must have taken place in its natural circulation.

England.

Disease of the Brain.—Dr. Favell, in the *Provincial Medical and Surgical Journal*, relates the case of a stout muscular man, thirty-two years of age, who was admitted into the Sheffield Infirmary under his care with severe pain at the occiput, occasionally accompanied by vertigo, and which he (Dr. Favell) regarded as caused by organic disease. The man was cupped, and placed under the influence of mercury, when the pain changed its character, and became intermittent. Quinine was accordingly administered, but the symptoms were aggravated; by the treatment afterwards adopted some relief was experienced, and the disease again apparently resumed the intermittent character. Quinine was again had recourse to, but the pain became more severe, and the man died in convulsions. Post-mortem examination: There was nothing remarkable in the appearance of the membranes. The arachnoid was moderately milky, the veins on the surface of the brain were congested, but not more so on one side than the other. There were not more bloody points than natural on incising the brain. The lateral ventricles were completely distended with clear transparent fluid. The central parts of the brain were softer than natural, but the substance of the hemispheres was firm. In the left lobe of the cerebellum there was a circumscribed portion, rather larger than a shilling, which had a ragged appearance, and was soft and pulpy to the touch; a small clot of coagulated blood was found in this situation. The rest of the cerebellum was healthy. Dr. Favell remarks that this case is neither devoid of interest nor instruction. The following particulars which it illustrates, demand attentive consideration. 1. Formidable disease of the brain may give rise to no urgent symptom but severe pain. 2. The pain occasioned by organic disease, at first constant, may assume an intermittent character during its progress. 3. The mode in which chronic diseases of the brain often terminate. Several other points of interesting inquiry will also doubtless suggest themselves, especially whether the softened state of the circumscribed portion of the cerebellum was the cause or the consequence of the extravasated blood which existed in the midst of it, and as to what occasioned the large effusion of serum into the ventricles. With respect to the treatment, although he was to some extent benefitted by the cuppings, blisterings, cold, and calomel, yet the relief was neither perfect nor permanent; it was, in fact, of very short duration. A more active mode of treatment was obviously altogether inadmissible in a person whose constitution was so greatly shattered, and in whom the symptoms had existed for so long a period (eight weeks). Dr. Favell regrets that he did not employ the long incision in the calvarium, as he at one time intended. It certainly might have been of service.

Nasal Hemorrhage.—Dr. Oke, in the *Provincial Medical and Surgical Journal*, recommends in cases of hemorrhage from the nose, when it continues to be so profuse as to peril the life of the patient, that the smaller finger be introduced up the nostril, and pressed upon its base and sides till the bleeding is stopped. The pressure having been kept up for a few minutes, a small compact dossil of lint, made wet with cold water and rolled upon powdered alum (if at hand), should be carried up to the point which had been compressed with the finger, and held there by the same pressure; after this, other little compresses of the same kind should be successively laid on by the handle of a teaspoon, or some such means, till the roof of the nostril supplies the pressure of the finger.

Autoplastic Operation.—A case in which Mütter's operation for the removal of the deformity resulting from the cicatrix of a burn was performed, is reported in the *Provincial Medical and Surgical Journal*. The patient, a child seven years of age, had been previously operated on by Sir John Fife, by simply dividing the adhesions, and fixing back the head; but after cicatrisation the integuments again became contracted, though not, as before, binding the chin down to the breast. The operation was performed on the morning of the 7th of April. Sir John Fife commenced by making an incision entirely across the throat, followed by a perpendicular incision at each end of it; he then dissected between the integuments and the cartilages of the larynx, so as to admit of an extensive separation of the contracted integuments. A considerable portion of integument was then dissected from above the right clavicle, turned at the right perpendicular incision, and fixed across the throat by seven or eight stitches. The right external jugular vein was exposed, but not wounded; a branch from the right superior thyroid artery bled freely. Some lint was placed round the neck, covered with simple ointment. Four hours after the operation there was some secondary hemorrhage, the dressings were removed, and another arterial branch near the former was tied. The integument placed across the throat looked slightly livid, but evidently retained its vitality. During the subsequent progress of the case, one half of the transplanted portion of integument lost its vitality, but the condition of the patient was nevertheless greatly improved.

[The following are the only articles of interest to the profession in two recent numbers of the Lancet.]

Delusions.—Hysterical Insanity.—Imbecility.—Dr Conolly states that in his experience delusions respecting the composition or form of the body are rare. In some cases in which patients believe that some extraordinary change has been effected in the interior of the body, Dr. Conolly thinks the delusion originates in some morbid state of the nerves of the part; this also, he thinks, will account for that irritability of surface, which leads

some patients to spend the whole day in washing and dressing. Modifications of the senses of sight, hearing, taste, and smell, are not at all uncommon. When patients mistake those about them for those absent, persisting in calling them by the names of the absent persons, and exhibiting towards them even for years, the sentiments of affection or aversion, which those for whom they mistake them would inspire, it is difficult to know whether there be not some ocular illusion; or the state is rather allied to somnambulism, in which, although the eyes are open, their "sense is shut," and the object supposed to be seen is merely that presented by the imagination. Dr. Conolly also imagines that the delusion of some patients respecting poison being mixed with their food, depends on a disordered condition of taste and smell. Many delusions, however, will not admit of this, nor of any other probable explanation. They perhaps prevail in consequence of defective innervation of some part of the brain analogous to what is observed in partial impairment of sensation; the mind only seeing half a subject, as the eye sees half an object. The insane usually pay little regard to the delusions of their neighbours but Dr. Conolly has met with exceptional cases. Among the chronic forms of insanity, none are more various in character, or require more patience in their management, than those associated with hysteria. They are generally in patients of very wayward temper, and the faculties of the brain seem to be so partially and so alternately active in them, as to make their characters differ extremely from day to day. Thus feelings of veneration and conscientiousness will one day prevail, and the patient's conversation will turn on religious topics and on her own unworthiness. The next day finds her manifesting gaiety and a love of melody; and various affections and propensities have their days of ascendancy, with various impulses and delusions. A general state of excitement, which finds relief in screaming, is not uncommon in these patients. Much more troublesome symptoms occasionally appear in hysterical patients however, and if treated with any degree of harshness, or even with neglect, they resent it strongly; they require to be treated firmly, but with great kindness. The continually maniacal, those liable to recurrent attacks, the hysterical, and those affected by morbid delusions and impulses, all become habitually quiet or habitually turbulent, according to the treatment they continually receive. The mind has suffered various degrees of impairment in all the chronic cases, one singular form of impairment, one idea, seems ever to prevail, and to occupy the whole mind, being either expressed in one set of words, or in some particular action every hour of the day, for years. All these, and many other peculiarities, seen in old cases, are, perhaps, only illustrations of what may be termed imbecility of mind, or certainly of some impairment of its equal strength, activity, and elasticity. Where such marked peculiarity is not observable, the impairment of the mental power, when the acute symptoms have subsided, is generally first noticeable in an excessive prolixity. There is no confusion, no particular irrationality, no incoherence; but the patient talks on without ever coming nearer to an end. The next step is to incoherent talking,—the outward manifestation of that incoherence of the thoughts which forms a very distinct stage of chronic insanity. This state, in which the ideas and language appear to have no connexion, or are such as only to show a succession without showing the connecting links, may succeed to any form of mania or melancholia. It is quite distinct from the wild incoherence often observed in recent cases, which is only a state of temporary confusion. Incoherence has also its varieties in chronic cases, as in some there is a want of uniformity of subject in the successive sentences, whilst in others, the different parts of each sentence have no discoverable relation to each other. Patients even in a state of confirmed incoherence are generally capable of answering a direct and simple question: they will reply rationally, and deliver a few coherent and rational sentences, from which they run off into inconceivable oddities of expression or of narrative. The patient's mind, in these chronic forms of incoherence, is always permanently enfeebled; and yet its state is different from that to which the term imbecility is usually applied. Imbecility, in relation to the insane, includes various degrees of impairment—sometimes shown in loss of memory, sometimes in a difficulty of replying, or in a slow performance of all mental and muscular actions, or in a defective attention to surrounding objects, and in indecision. It may come on soon after the maniacal state has been observed, without any intervening incoherence; but it commonly only supervenes after a long attack, or rather after several attacks. It also supervenes on melancholia, and although it has not received much separate attention, it is a very serious result, yet often admitting of improvement. In many such cases there has existed some congenital defect, very little observed in early life, but which becomes declared as youth advances. This is especially the case when girls are the subject of the infirmity. Not being called upon for much intellectual exertion, their great deficiency is for a long time scarcely suspected. Dr. Conolly, in speaking of the influence of bodily debility on the mind, says a degree of imbecility of mind is often shown when the bodily strength of young persons is impaired. The brain falls into condition of debility without insanity. To a certain extent, varieties of cerebral energy constantly accompany the variations of bodily health. His experience in these cases convinces Dr. Conolly that they always tend to become worse.

IMBECILITY.—Dr. Conolly remarks that temporary debility of the brain may be the real and only cause of this malady. He has known it induced in delicate women by menorrhagia and by miscarriages: the mind is, under these circumstances, brought into a state in which everything is indifferent to the patient, and an inability is felt to decide upon any one thing in preference to anything else, or to refrain from yielding to the opinions of others. The sense of reality is described as being lost, and the patient imagines herself to be dead, all her relations to the external world being weakened. In some cases, the body and the mind recover strength together; but in too many instances, successive attempts at recovery are followed by renewed oppression and all hope of restoration gradually disappears. The dull state to which patients are reduced in the various stages of this declension frequently causes these cases to be classed under the head of melancholia; but the depression is not occasioned in these patients by sadness or despondency—it is the depression arising from diminished power. Imbecility may, however, supervene on melancholia, as well as on mania. The first melancholy state often depends on impairment of the energy of some portion of the brain; and the patient falls, without any paroxysms of excitement, into entire mental feebleness. There is something like an attempt at restoration visible from time to time even in the worst cases: the faculties seem to be partially reanimated, sometimes for a few hours, or for a day; and these returns of excitement and power occur with something like regular intervals. But all strong impressions, any physical or mental shock, powerful stimulants, or even strong doses of purgative medicine, make the weakness of the faculties more conspicuous, and their folly more rapid. Among male patients affected with paralysis, the mind is variously impaired. In some of these cases the distress of the patient is greatest when the impairment is least. In the midst of his usual occupations, a slight paralytic attack has occurred, of which he has been scarcely conscious, or which he has not noticed at all. But to every observer he is seen to be an altered man. He has the appearance of a man who has been drinking; his speech is faltering, and he walks unsteadily. For a time he persists in attempts to go on with his work, unconscious of the blunders he commits; and at length he is removed to an asylum. Remembering most of the transactions which have formerly occupied his attention, and retaining his family and social attachments, he cannot comprehend why he has been removed from home, and is often irritable and angry on account of the supposed injustice done to him. He even fancies himself fitter for business than he was before, and calculates the great loss he sustains by being debarred from his customary employment. Every morning he requests to be supplied with pen, ink, and paper, and he writes letters, perhaps very well expressed, referring to past undertakings, making statements of accounts, and, from partial loss of memory, claiming money as due which has long been paid. The same letter will be written by some patients thus affected again and again, week after week, for months, and nearly word for word each time; but neither in the letters, nor in conversation, is any incoherence for a time exhibited. Subsequently, the usual exaltation of ideas in these paralytic cases supervenes on this first and fatal impairment, the patient being, even from the first, disqualified for all future efficient exertion. More extensive delusions follow; prolixity passes into incoherence, and the imbecility of the mind extends onward to the dementia in which life closes. Dr. Conolly states that many, both among males and females, continue for years in a state of very slight, though irreparable, impairment, when the subjects are protected from turmoil or agitation. In every congenital case, Dr. Conolly says that external signs of defect, in the shape of the head,—in the expression of the countenance,—and in the movement of the limbs and of the muscles in general are present. But no two cases are exactly alike. Each congenital imbecile person, and each idiot, has a distinct character, and the observation of these poor patients would repay a closer attention than they usually obtain. Idiocy is always a congenital defect of mental capacity. However various in character or degree, it always incapacitates the individual for social relations. In some idiots certain intellectual faculties, affections, or propensities, are active, and others seem to have no existence. The propensities are commonly more active in these unfortunate beings* than any of the higher faculties, and bring them towards the rank of the lower animals. The lowest idiot is often seen to be contentious, or amatory, or fond of making acquisitions of imaginary value; his desire for food is usually great and indiscriminate: those less completely idiotic exhibit vanity and cunning, but they never seem to attain the higher faculties or qualities of benevolence or veneration. The power of using the important gift of speech is also defective, to a greater or less extent, in persons of congenital imbecility of mind; less, probably, in many cases, from defective organisation of the organs of speech, than from the mental incapacity to learn the uses of speech, or to connect words with their limited ideas and perceptions. Dr. Conolly believes, however, that many of these patients might be taught to understand and employ artificial and natural signs for ideas, and by that means have the exercise of all their intellectual faculties much enlarged. It is important, in relation to medical jurisprudence, to recollect that idiocy and imbecility may, in some instances, chiefly affect the moral faculties. This has long been known to medical observers, and has been elucidated, and placed beyond dispute, in the works of the most distinguished phrenological writers. Long observation has convinced Dr. Conolly that there are many unhappy individuals in society whose faulty characters are connected with some disturbance or interruption of the development of the fœtal or infant brain. In some of these individuals, with much talent, and many engaging qualities, there is a moral eccentricity, wondered at by happier organisations, but fatal to their own fortunes; in others, it leads to actions which society cannot tolerate, and agrees to punish. The ultimate stage of mental oppression is termed dementia. The patient stands in one place nearly all the day long, silent, motionless, and manifesting no sign of intelligence. The state of dementia is, in fact, a condition of stupor or general depression of the faculties, in which the patient exhibits no affections, no intellectual faculties, and no active propensities. It is a state which sometimes supervenes early and suddenly, but it is usually the last in the train of mental disorders, coming on after mania and melancholia, which have existed at least two or more years. The patients look pale and unhealthy; their pulse is feeble, but they eat well, and live many years. However well the brain is developed, and however well organised, its functions are still limited to a period which differs much in different individuals. Not a few patients become insane soon after fifty years of age, the energy of the brain giving way perceptibly, sometimes with a short-lived agitation, and becoming so reduced as even to disqualify the

patient for application to his ordinary labour. The patient often falls into a state of indolent content, in which he lives, with very little further change, for years, if removed from all sources of excitement. Women are not exempt from the form of mental malady and decline just described; but as their intellectual life is commonly less active than that of men, the change does not attract so much observation when it occurs in them. Symptoms of general debility—as paleness, thinness, a failing appetite for food, a very feeble pulse—are frequently found accompanied with religious despondency, and an apprehension of ruin. The patient neglects her dress, almost starves herself, and thinks she has always been wicked and hypocritical, and has become an outcast from redemption; or, if a more hopeful character, thinks she has had revelations from Heaven, and, although inclined to denounce, as lost, several friends whom she formerly regarded, enjoys a most happy anticipation of her own future state. All the peculiarities mentioned are aggravated in cases of senile insanity,—a form of malady which appears not only in persons who have always had a feeble mental and bodily constitution, rendered now more feeble by advancing years, but which too often appears in those whose bodily health, carefully preserved by a diet and regimen only somewhat too scrupulous, has prolonged life beyond its natural term, and seemed to endow them with a vigour and activity that defy the assaults of age. In them the mind sometimes dies long before the body; and violent mania, or "mere oblivion," make their death prayed for by all who have loved and revered them.

Alkaline Remedies in Hooping-cough.—Dr. Alnatt, in speaking of the treatment of hooping-cough, says that after preliminary purgation with calomel (conjoined with antimony,) if the febrile symptoms run high), and an occasional emetic to clear the stomach, nothing in his experience has been so efficacious as small and repeated doses of the carbonate of potassa. The following combination has been extensively distributed to the poor in seasons when hooping-cough has raged as an epidemic, and Dr. Alnatt attests the almost invariable success which has attended its administration —what portion of the merit is due to the cochineal he does not know:—Take of carbonate of potassa, one drachm; cochineal, ten grains; boiling water, half-a-pint. For an infant, one teaspoonful to be taken thrice daily, the dose increased according to age. In violent cases, much benefit often accrued from the simultaneous employment of the following liniment, which is to be well rubbed, morning and night, over the whole course of the spine:—Hartshorn, and oil of amber, of each half an ounce. Mix for a liniment.

Nitrate of Silver in Venereal Ulcers — Mr. Acton states that experiments on a large scale clearly show that after a sore has existed three days, no means will invariably succeed in preventing the constitution from becoming contaminated; up to that period, however, the disease is completely under control. Although, then, freedom from secondary symptoms after that time cannot be absolutely promised, still, in nine cases out of ten, we may reasonably hope that they will not follow; and, therefore, so far as local and general measures are considered, cauterisation is most desirable and needful. Certain states, however, may be present, in which the application of the caustic would be not only useless but injurious. The first of these is inflammation. Mr. Acton remarks that, although, the nitrate of silver may be useful in subacute inflammations by allaying irritability, when chancres are attended with acute inflammation, caustic will be worse than useless; experiments prove that phagedena destroys the virus, and they likewise show that caustic increases instead of allaying inflammation; therefore, when present, recourse must be had to opium, rather than to nitrate of silver. When previous applications have irritated the sore, nitrate of silver should never be applied. In these cases simple water-dressing will generally effect a cure. Induration of sore also counterindicates its cauterisation. The surgeon should never cauterise a genuine Hunterian chancre, or one attended with induration; if he do, he will cause great pain, the sore will become irritable, and gangrene will often follow. During the treatment, a patient will occasionally complain of vague pains in the groin, in some cases shooting down the cord; the finger can, however, detect no tenderness or enlargement in this situation, and these cases may generally be set down to irritation of the extremities of the nerves, which will disappear as soon as the irritation ceases. On the first appearance of swelling or heat in the groin, Mr. Acton recommends immediate recourse to rest, leeches and cold applications. The necessity of low diet, according to his experience, is doubtful. In the local treatment of *uncomplicated* chancres, these simple means are the best adapted to a speedy cure; and Mr. Acton protests loudly against any general or constitutional treatment being employed, provided the health be good; in such cases the patient need not observe any restriction as to diet, but he should abstain from horse-exercise, or violent excitement of any kind. The result of numerous cases treated during the last five years, which still remain under his observation, induces Mr. Acton to believe that mercury is by no means necessary either in expediting the cure, or in preventing secondary symptoms, which only occur in such feeble proportions that they should not enter into the calculation. Exceptional cases may injure the reputation of the surgeon, and he may be told that had the patient taken mercury, constitutional infection would not have followed; but in nine out of ten other cases, the patient will justly extol the merits of his surgeon, who has spared him a course of mercury, which immunity from constitutional disease proves would have been unnecessary. Mr. Acton wishes it to be understood that these observations apply only to the form of simple uinindurated chancre.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

By G. J. GUTHRIE, F.R.S., &c.

LECTURE V. (concluded).

Baron Dupuytren's case of femoral aneurism from a blow; Failure of compression; Ligature of the external iliac artery; Return of pulsation in the aneurism on the eighth day; Secondary hemorrhage from the lower end of the wound; Ligature of the iliac artery higher up; Return of the hemorrhage; Cure by compression; Remarks on the case; Case of wound of the inguinal artery; Ligature of the upper end of the wounded vessel; Fatal secondary hemorrhage; Case of ulceration of the external pudic artery, following a sloughing bubo; Secondary hemorrhage; Application of the actual coutery and pressure; Return of the hemorrhage; Extension of the ulceration to the femoral artery; Ligature of the external iliac artery; Symptoms of mortification; Successful amputation close to the trochanter; Dr. Warren's case of secondary hemorrhage after amputation of the thigh; Ligature of the femoral artery; Return of the hemorrhage; Successful ligature of the femoral artery an inch below Poupart's ligament; Case of femoral aneurism opened by mistake; Amputation, and death; Case of inguinal aneurism opened by mistake; Ligature of the external iliac artery; Fatal gangrene; Remarks on the case; Case of inguinal aneurism, extending under Poupart's ligament; Successful ligature of the external iliac artery; Death eight years afterwards; Mr. Canton's anatomical description of the collateral vessels; Dr. Horner's case of ligature of the external iliac artery for inguinal aneurism; Incision of the sac, and removal of the coagula, followed by formidable hemorrhage; Division and ligature of the femoral artery below the sac; Hemorrhage from the upper end of the artery, and application of a ligature on it; Cessation of the hemorrhage; Death from inflammation and suppuration behind the peritoneum and external iliac artery, up to and behind the right kidney; Probable source of the hemorrhage from the branches of the profunda, with those of the internal iliac, and from the epigastric and circumflexa ilii; Remarks on the case; Dr. Horner's case of varicose femoral aneurism from a pistol-shot; Ligature of the femoral artery at the injured part; Mortification of the leg, for which amputation was performed; Consecutive formation of an aneurism at the extremity of the artery; Puncture of the sac; Consecutive hemorrhage, arrested by the application of several ligatures around the sac; Fatal recurrence of mortification; Dr. Brainert's case of inguinal aneurism following a fracture of the femur; Successful ligature of the external iliac; Mr. B. Cooper's case of femoral aneurism, consecutive on compound fracture of the thigh; Successful ligature of the femoral artery.

Case 102.—T. Berger, aged forty-five, struck his groin with the end of a plank, and two months afterwards discovered a tumour the size of a hazel-nut, about two inches below the crural arch. A year afterwards, having made a violent exertion, the swelling increased to the size of a hen's egg, and soon after became larger. Compression was employed in vain, and on the 16th of October Baron Dupuytren tied the external iliac artery. On the eighth day afterwards, the circulation was established in the limb, and pulsation was felt and seen in the tumour. On the ninth the swelling was diminishing in size, but the pulsations were more distinct. On the twentieth day they were quite sensible to both touch and sight, and on the same day hemorrhage occurred from the wound. It was repeated on the second day, was arterial, and apparently from the lower end of the wound. The iliac artery was tied again higher up, and the pulsation in the tumour ceased for six days. It then returned, and it was plain that the blood which flowed did not come from the end of the artery which had been tied, but from vessels placed between the ligature and the ventral aorta; and what vessels, the Baron asks, could it be, unless it were the internal iliac and the internal mammary. By what trunk was it that the blood was conveyed to the aneurismal sac? The femoral artery presented no pulsation below the tumour, and compression appeared to increase rather than diminish it. Was it by the profunda? The position of this artery behind the tumour rendered it difficult to say. Was it, in fine, by the epigastric artery? The double communication of this vessel with the substernal and obturatrix is well known; nor is it a rare thing for a very considerable arterial branch to extend from the one to the other of these arteries. This idea induced him, he says, to examine carefully the course of the epigastric artery, and it was with no small surprise that he felt strong pulsations along its course, even through the thickness of the abdominal parietes, and especially in the vicinity of the tumour. It hence seemed probable that the epigastric artery was the principal agent in restoring the pulsations to the tumor, and that in this case, as it happens sometimes after tying the primitive carotid, the very facility of communication, so far from favouring the cure, was the cause of the reproduction of the disorder. In the present instance, that facility had the additional inconvenience of giving rise to hemorrhage that might prove fatal.

Baron Dupuytren made compression above and below the wound; the former allowed blood to flow, the latter stopped it. The blood, therefore, he says, came from the lower and not the upper end of the artery. Graduated compresses and bandages were applied, five hemorrhages took place, and were suppressed between this and the thirty-sixth day, when the tumour, having apparently suppurated, was opened, and a quantity of sanious matter and thick pus was discharged. After this Berger went on well, and in two months was cured.

Remarks.—The collateral circulation restored the pulsation in the aneurismal sac on the sixth day. If there had been an open wound, Berger would have bled to death. If there had been a diffused aneurism with a hole or two in it, he would equally have bled to death. If the circulation had not been so restored as to enable the patient in such a case to bleed to death, he would have died of gangrene. Nothing can more clearly show the impropriety of placing a ligature on the external iliac artery for a wound of the femoral. This case was published in 1833, three years after the publication of my work, in which I have pro-

nounced this operation to be inapplicable to a wounded artery, without a shut aneurismal-sac.

CASE 103.—Sir C. Bell, in a lecture delivered at the Middlesex Hospital on the 20th December, 1831, made the following statement:—A man was wounded in the artery of the groin, and stopped the bleeding by holding the cut parts together until the surgeon arrived. He opened the wound, the man lost a quantity of blood, and fainted. The surgeon tied the artery, and went away. Hemorrhage recurred, and the man died. The surgeon was not aware, says Sir C. Bell, that the circulation is so free that the blood must flow by regurgitation where there is an open wound. A ligature must be applied first above and then below the wound in the artery.

CASE 104.—William Besset, a man whose constitution had been much injured by mercury, was admitted into hospital on the 1st of December, 1816, with an extensive, irritable, and sloughing bubo in the groin. On the 26th of the month, the external pudic artery, which was involved in the ulceration, burst, and discharged about a pint of blood, which was restrained by pressure; a second hemorrhage took place next day, and the ulceration spread still farther. On the 31st, the blood sprung from the artery in a full jet, when the actual cautery and pressure restrained it. On the 12th of January, the hemorrhage again returned, and was controlled by pressure. It continued to recur so often from this period, that the life of the patient was in imminent danger, until, on the 22nd, a dreadful discharge of blood threatened at once to terminate his existence. Constant pressure was now applied, and next day, on consultation, the parts were accurately examined, when, on removing the clots, it was found that the femoral artery itself had given way. No other resource then remained but tying the external iliac, which was accordingly done. On the 24th the limb felt cold, and was insensible, except when firmly pressed upon. On the 25th the discoloration extended, a vesicle formed about the centre of the thigh, and a considerable quantity of coagula and sanies was removed from the groin. On the 1st of February, tension and pain of the abdomen came on, which was relieved by a dose of castor-oil. On the 2nd, vesication in various parts of the thigh began to establish itself. On the 9th, amputation was performed at a point close up to the trochanter, everything went on well afterwards, and the man perfectly recovered.—*Hennen's Military Surgery*, page 185, 2nd edition.

Remarks.—If the artery had been tied below or immediately under Poupart's ligament, so as not to have deprived the limb of the advantage of the collateral supply of blood from the epigastric and circumflexa ilii arteries, the man's limb might have been saved. The surgeon thought it safer for his operation not to interfere with diseased parts. Considering his operation *only*, he was right.

CASE 105.—Dr. Warren of Boston, U.S., relates the following case in a recent communication to the Royal Medical and Chirurgical Society of London:—Amputation of the thigh was performed on account of disease in the condyles of the femur. Fifteen days after the operation hemorrhage occurred from a small artery near one of the angles of the stump, and at some distance from the ligature of the femoral, which still remained upon the artery. The parts were in a great measure united, so that it would have been extremely difficult to discover the bleeding vessel by dividing the recently united parts, and this was only way it could be done. The patient being in a sinking state from the loss of blood, the femoral artery was tied four inches from the stump. The bleeding was arrested, but only for a week; it then returned from the same spot. The femoral artery was again tied at the distance of an inch below Poupart's ligament, care being taken to ascertain that the profunda was not immediately above the ligature. There was no return of the hemorrhage and the patient became in a short time perfectly well.

Remarks.—According to my principles an incision should have been made on the face of the thigh through the parts down to the bleeding end of the artery, and a ligature should have been applied in sound parts, perhaps an inch above it, no branch intervening. The case is highly valuable, as showing how readily the profunda can maintain a hemorrhage, and how safely the femoral may be tied above its origin when sound.

CASE 106.—A man, past the middle age, was sent to the Westminster Hospital by me in consequence of a large aneurism at the lower half of the thigh having been opened by mistake. The incision was too large to give hope of its healing, a large quantity of blood had been lost, and it appeared advisable as the case was so clear, to do something which might prevent a return of the hemorrhage. As this was an aneurism from a disease of the artery, it was useless tying it at the part. If the artery were secured at the usual place, it was probable that bleeding would occur from the open sac, and from the lower end of the artery, and seeking for that vessel in its passage into the ham, was likely to terminate badly. On consultation with Mr. White we decided on amputating the limb as giving the man the most certain chance of preserving life. It failed, however, of success, the man sinking after a few days from the defect of constitution, which had led us to prefer amputation as the least injury that could then befal him.

I had some regret after his death that I had not tied the femoral artery in the usual place, and stitched up the incision, covering it over with sticking plaster, compress, and bandage, so as to form a temporary barrier at least against bleeding, and thereby to gain a little time, awaiting events. In the following case I practised it, but not with a more successful result:—

CASE 107.—William Oakley, aged twenty-seven, admitted into the Westminster Hospital, September 10th, 1831, with an aneurismal swelling six inches in diameter, three above the level of the surrounding parts, the apex three inches below Poupart's ligament on the left thigh. The apex had been opened by mistake, and about four pints of blood had escaped. The complaint was at least of three months' standing. The external iliac artery was tied by me next morning, the 11th, and and the man died on the 13th from gangrene of the extremity. Four ounces of fluid mixed with flocculi of lymph were found in the abdomen, the peritoneum being slightly inflamed for four inches around the incision, but being itself unhurt; the iliac artery was properly secured. The aneurismal sac contained eighteen ounces of coagulated grumous blood besides the layers adhering to the wall of the sac, which extended upwards under Poupart's ligament, in a line with the inside of the ilium.

Remarks.—The extension of the sac under Poupart's ligament rendered this operation difficult; and induced me in my subsequent ones to make the first incision more parallel to the ilium on the anterior part of the abdomen, which much facilitates the operation, enables the operator to tie the artery as high as he pleases, causes less disturbance to the peritoneum, and lessens thereby the chance of peritoneal inflammation. I was not at that time aware of the advantages to be derived from friction applied to the leg and foot in preventing gangrene, but tried everything else usually recommended, and failed, the man dying of mortification of the limb, and of peritonitis.

In the clinical remarks I made on this case, and which I did not know were published in the *Medical Gazette* for October, 1831, until I met with them lately, I drew attention to the fact that when an aneurism bursts, or when a spurious aneurism forms from a wound, the pulsation is not only seen, but the noise made by the blood against the edges of the cut or ruptured artery is peculiar, unless obscured by the great quantity of coagula formed after extravasation. It is worthy of remembrance.

CASE 108.—A young man was some time afterwards admitted into the Westminster Hospital with a femoral aneurism extending so much under Poupart's ligament as to cause me to believe I should be obliged to place the ligature on the common iliac, and I performed the operation accordingly. I found, however, that I could conveniently apply the ligature (a single thread of strong dentists silk) a little below its division into external and internal iliac arteries, at which spot it appeared to be sound on being brought into view by turning the peritoneum containing the intestines to the opposite side. Major Fancourt, then an M.P., was present, and he told me on leaving the hospital that the late Mr. Lynn thought the operation so dangerous, that when it was over he said to him, "There, you have now seen a man killed in a right surgical manner." It was in this case I first tried friction to the foot and leg kept up for hours. It was successful in preventing mortification, and the patient rapidly recovered. He died some eight years afterwards of disease unconnected with his aneurism, and Mr. Canton, of the Charing-cross Hospital, who assisted in the dissection, has favoured me with the account of the distribution of the collateral vessels.

"The ligature had been placed round the external iliac artery at a part almost immediately below where it passes from the common trunk. From this point to near Poupart's ligament the vessel was much contracted, and reduced to the condition of a dense, fibrous-looking, impervious cord, of about the size of a crow-quill, though more irregular in outline than it. The most contracted spot was where the artery had been tied.

"From where the deep circumflexa ilii and epigastric vessels are given off, the external iliac was found to be pervious, and of about its natural size. The above-named branches, together with the ilio-lumbar were somewhat larger, and more tortuous than usual. The gluteal and obturatrix arteries were of more than twice their natural size, and as much curved as the splenic. The ischiatic was enlarged, but not proportionally so much as the two former ones. All the *chief* anastomatic communications of these vessels, as the circumflex arteries from the deep femoral, &c., were increased in calibre, whilst the small subsidiary inosculating branches in the neighbourhood of the operation, as the superficial epigastric, circumflexa ilii, muscular twigs, &c., were of their ordinary magnitude.

"The most remarkable permanent enlargement in the vicinity was that of the little vessel pursuing a somewhat parallel course to the femoral trunk, the 'comes nervi ischiatici' was about thrice as large as usual, and in its passage [illegible] cated with muscular branches, off[illegible] from the p[illegible] forating arteries, and in the ham, with some mi[illegible] ramifications of the articular and muscular branch from the popliteal. The comes nervi ischiatici was so tortuous in its whole course that the convexities of the numerous curves almost touched one another."

CASE 109.—Dr. Horner, of the University of Pennsylvania, placed a ligature on the external iliac artery, just above the origin of the epigastric artery, in consequence of an aneurism of the femoral in the groin, extending under Poupart's ligament, especially on its outer side. This operation having been completed with great precision, as was proved after death, Dr. Horner thought it right to open the aneurismal sac, which, after the laminated fibres and coagula had been removed, poured out arterial blood in the most formidable and urgent manner, so that the patient lost more than twenty ounces in a few minutes. The sac was further laid open, in doing which the femoral artery below was cut through, and both ends were immediately secured by ligature. This in part arrested the bleeding, but did not suppress it. It was now found that the upper end of the femoral artery coming into the superior part of the sac was pouring out blood; this was also tied. The bleeding now ceased, and as no bleeding orifice could be discovered on the inner surface of the sac, another ligature was placed on the femoral artery above the last by way of precaution. The man died exhausted, but without further bleeding, on the sixth day. Dissection showed inflammation and suppuration behind the peritoneum and the external iliac artery, up to and behind the right kidney. On examination of the aneurismal parts it was found that "an orifice of an inch in length existed on the iliac side of the femoral artery, that the sac itself was formed almost entirely by the contiguous cellular substance of the inguinal and iliac margins of the cavity of the sac. The profunda artery arose at or near the aneurismal orifice; the precise point," Dr. Hunter says, "I did not ascertain, but I believe very close to its upper end; we may therefore conclude that the retrograde hemorrhage came from anastomosing of its branches with those of the internal iliac artery, and also from the epigastric and

circumflexa iliac judging from the incidents of the operation."

Remarks.—If Dr. Horner had been contented with his first operation he might perhaps have succeeded better. By opening the aneurismal sac he brought it into the state of a wounded artery, into which the collateral circulation readily brought blood, and he had to treat it as a wounded artery with the disadvantage of its being also a diseased one. It is an admirable case to prove the impropriety of treating a wounded artery communicating with an external opening by the operation for aneurism, done at a distance; for the bleeding must recur, as it has been shown to have done in almost every instance which has been adduced.

Case 110.—Col. F., aged thirty, of a powerful habit, was wounded by a small pistol ball, April 15, 1837, which entered the left thigh two inches below and a little within the anterior superior spinous process of the ilium, and ranging very nearly in line with Poupart's ligament, came out on the inner side of the thigh a little below the scrotum. It was followed by a profuse hemorrhage estimated at several pints; the patient fainted and remained insensible until next day; from this state he recovered, and in July a strongly pulsating tumour was felt just below Poupart's ligament in the course of the femoral vessels, which had the thrill and vibratory motion of varicose aneurism, with a loud, quick purring noise like that of a cat A very strong pulsation was felt in the epigastric region; a feeble wavy pulsation was discernible in the opposite femoral vein at Poupart's ligament, as if arising from the arterial blood passing from the left femoral artery into the left femoral vein, and upwards to the vena cava, whence it was communicated downwards. Dr. Horner, satisfied that all varicose aneurisms should be operated upon at the part injured, tied the femoral artery on the 10th of the month, immediately below Poupart's ligament, and all pulsation ceased. On the 14th, mortification of the leg was evident, and eventually extended up to the tumour on the thigh. On the 26th the thigh was cut off through the mortified part. On the 2nd of August, twenty-two days after the operation, the ligature from the femoral artery was cut away. On the 3d a small white and very sensible tumour, without pulsation, in the situation of the extremity of the artery was punctured; and a flow of blood took place, which pressure on the artery above did not suppress. This tumour, which proved on further investigation to be aneurismal, and of new growth, was cut off by various ligatures applied around it, when the bleeding ceased, showing that in all probability the hemorrhage had come from a retrograde instead of a downward current of blood, and which was proved to be the case after death. Twenty-eight days after the first operation, the parts included in the last ligature looked black and dead, and with the aneurismal tumour ready to drop off, the patient looked like a breathing corpse, but he did not die until four days after.

It was found on examination after death that the upper part of the femoral artery was firmly closed at its cut extremity for a line in thickness, having a conical coagulum of bloody fibrin adhering to it, about three lines in length, with the apex upwards. The lower part of the artery was separated from the upper at the part where the ligature had been applied; the canal of the artery put on the appearance of a dilatation; was thickened and pervious to its end. The femoral vein was open from below upwards and exhibited signs of being inflamed as high as the ascending cava—a certain cause of death.

Dr. Horner supposes that mortification took place from the blood of the collateral circulation pushing its way into the femoral vein instead of descending to the foot, and he inquires whether the collateral branches should not if possible be enlarged before an operation for aneurism is performed.

Case 111.—Dr. Brainert, of the University of St. Louis, was called to a gentleman of Chicago, in Illinois, U. S., who had fractured the neck of the femur twelve weeks before, and which had not united. For twelve months after this he wore a starch immoveable bandage, when an aneurismal tumour was perceived at the upper part of the thigh under Poupart's ligament, and which he had seen for twelve weeks. The external iliac was tied, and the patient recovered, the tumor subsiding very slowly under pressure. The bone remained ununited. This was in all probability an aneurism formed from the broken bone having injured the artery some time before it took place.

Case 112.—Mr. Bransby Cooper in his Surgical Essays, page 79, relates the case of R. Weaver, who had suffered a compound, but not comminuted, fracture of the lower third of the femur, on the 5th of February, the opening in the integuments being a small laceration, over which a piece of lint was placed. On the 9th a diffused swelling in the ham was first perceived, evidently aneurismal. The femoral artery was tied in the usual place above the fracture, and the man recovered. Mr. Cooper observes, "With respect to securing the vessel, the surgeon would be guided in such a case by the situation of the external wound; for had the wound in this case been in such a situation as to admit the escape of the diffused blood, I consider the case would have been entirely altered, and that the limb must have been amputated, or else the wounded artery tied above and below the opening, which in the popliteal space could hardly be accomplished; but as the blood did not escape, the coagulum was capable of forming so firm a compression upon the wounded vessel, that upon the application of a ligature above there was no fear of the recurrence of the hemorrhage.

Remarks.—I concur in opinion with Mr. Cooper, and in the practice pursued, as the wound in the artery did not communicate with the external opening. If it had done so from the first, it would have been a question of amputation. In a healthy man I should have preferred, in the first instance, tying both ends of the wounded artery, and awaiting events, watching carefully the approach of mortification, for the purpose of removing the limb at the earliest possible moment.

ORIGINAL CONTRIBUTIONS.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery in St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

FIBROUS TUMOUR.

(Continued from page 154.)

S. G., aged thirty-two, short, very stout and rubicund, married five years, twice pregnant, but miscarried each time at an early period.

July 30, 1842.—Complains of much pain about the sacrum and left groin, and also of the perineum when she sits down. Pain and difficulty in passing fæces and urine, the latter of which is facilitated when she leans forwards; leucorrhœa.

Has rapidly grown very corpulent during the last twelve months, until which time she was thin and spare; her present symptoms came on eight weeks ago, with pain in passing water, and sudden retention; a tumour also, about the size of an egg, presented itself at the vulva, which was easily reducible by the finger, since which she has observed the leucorrhœa.

Examination per Vaginam.—Os uteri looking forwards; cervix close behind the symphysis pubis; a large hard and solid tumour is felt occupying the hollow of the sacrum; it is intensely tender to the touch.

Hirudines decem ori uteri. R. Extr. gentianæ, Extr. hyoscyami, āā gr. v, o.n.; Mist. menthæ sulphurica c. magnes. sulph., ℥ j, o.m.

August 20.—Is suffering considerably from piles, and from pain across the abdomen, with diarrhœa.

R. Hydrarg. c. cretâ, Pulv. ipecac. co., āā gr. v, o.n.

R. Confect. aromat., ʒ ss; Pulv. rhæi, gr. x; Aquæ cinnamomi, ℥ iss, o.m.

Hirudines vj ano.

She now became an in-patient at St. Bartholomew's, during which she was leeched, and the general health attended to, and after a while she left the hospital considerably relieved. She continued to attend at the out-patients' room from time to time, on account of frequent attacks of clay-coloured diarrhœa, with severe hemorrhoidal suffering.

Towards the latter end of last year she made her appearance, at the Hospital for the Diseases of Women, in the greatest suffering, and so broken down in health, that I thought it scarcely possible for her to rally. For the notes of her case during her stay here, I am indebted to Mr. T. S. Lee, of Upper Gordon-street, the successful competitor for the Jacksonian prize of the College of Surgeons for this year, who took charge of the case under my directions.

November 27, 1845.—Countenance pale, anxious, and haggard, expressive of suffering, with a jaundiced tinge about the face; complains of great pain in the right side of abdomen, where there is a large tumour above the pubes, as large as a child's head. The difficulty in retaining and passing water is less than it seems to have been in former years; but she is still unable to retain her water for any length of time, and is obliged to answer the call to pass water the moment it is made. The bowels are now open, but are usually confined, and when so the fæces are passed in a flattened state. She has large piles, which frequently bleed. She describes the pain in the uterus to be of a darting, shooting, throbbing character, extending from the tumour to the back. The left leg has latterly become œdematous with varicose veins.

Abdominal Examination.—The tumour extends from the pubes to the umbilicus; it is hard, painful, and easily defined.

Examination per Vaginam.—The pelvis is occupied by a hard mass, not very painful on pressure; it presses backwards into the hollow of the sacrum, and forwards above the pubes. The os uteri can be reached with difficulty, being high up and forwards, and much compressed between the uterine tumour and pubes.

An exploring needle was passed into the tumour to the depth of between one and two inches, without producing pain except when puncturing the mucous membrane.

The uterine sound passes to the extent of four inches, and can be felt through the abdominal parietes.

April 4.—This patient remained in the hospital four months. On her admission she was so broken down in health and strength, that I had considerable apprehensions the disease would soon destroy her. Leeches were applied per vaginam about twice a-week for some time; the congestion and pain of tumour diminished; the bladder and rectum were no longer obstructed; her health improved rapidly, and she was made an out-patient, but has not availed herself as yet of this privilege.

The history of this case is but an imperfect one, as is usually seen where the patient has been chiefly an out-patient at an hospital, and coming only at distant intervals. The tumour was an extremely hard one, so that although I regret that I applied no mercurial ointment per vaginam, I was by no means sanguine of producing any diminution of its size beyond that produced by the state of active congestion in which it was when she was admitted into our little hospital in Red Lion-square. It is for the purpose of showing the valuable effects of applying leeches to these tumours when in this condition, that I have ventured to give the present case; it is difficult to estimate with any degree of nicety the precise increase or diminution in size of a solid tumour deeply imbedded in the lowest parts of the abdominal cavity and pelvis; but the relief which she experienced in evacuating the bladder and rectum showed that the pressure which the mass had exerted upon these organs had considerably abated, and that they were now able to perform their functions without much obstruction.

M. W., aged thirty, married ten years, once pregnant, shortly after marriage, but miscarried.

March 9, 1839.—Was admitted into St. Bartholomew's on account of inability to pass water, requiring the use of the catheter. Bowels much constipated; fæces flattened; general health good; menstruation regular and natural, although scanty; has piles.

Twelve months since she began to suffer pain in the back and legs, shooting towards the rectum. She first noticed the piles and difficulty in passing water four months ago, which latter gradually b

came so severe as to require her to have the bladder emptied by a catheter. This difficulty, however, abated considerably, and she experienced but little inconvenience from it until last week, when she was again compelled to have the water drawn off. Her general health has been tolerably good; but the bowels are habitually constipated, and the fæces always flattened.

Examination per Vaginam.—A large solid spherical tumour was found involving the body of the uterus, and nearly filling up the whole pelvis; the os uteri pushed over to the vicinity of the left foramen ovale, and much squeezed and flattened by the pressure of the mass; as the tumour was slightly moveable in the pelvis, although evidently exerting considerable pressure on the rectum and bladder, I endeavoured to raise it out of the pelvic cavity, and with some difficulty succeeded in pushing it fairly through the brim of the pelvis into the abdominal cavity. The uneasy sensations of pressure and distension produced by the presence of the tumour in the pelvis, were instantly relieved. It was now plainly to be felt above the symphisis pubis, and she could evacuate the rectum and bladder with perfect ease.

I saw her again May 25th: the tumour retained its position in the abdominal cavity, and gave her but little annoyance.

It was, I believe, Sir C. M. Clarke who first attempted this simple mode of treatment; it is true that only a few cases are capable of being relieved by this means, viz, where the mass happens to be of the right form and size—a little more or less makes all the difference. I remember a case many years ago where the size of the tumour seemed to point out this plan of proceeding as a means of relief; it occupied the cavity of the pelvis pretty closely, but on raising it above the brim it slowly descended again, and would not remain in the abdominal cavity. In a case which is now under my care it seems to fit the pelvis *exactly*, for it can be raised or depressed at will, and remains stationary whether in the abdomen or the pelvis.

ON THE POWER OF THE MIND OVER THE BODY:

AN EXPERIMENTAL INQUIRY INTO THE NATURE AND CAUSE OF THE PHENOMENA ATTRIBUTED BY BARON REICHENBACH AND OTHERS, TO A "NEW IMPONDERABLE."

By JAMES BRAID, M.R.C.S.Edin., &c., Manchester.

Few publications have lately issued from the press so well calculated to excite general interest and inquiry, as Baron Von Reichenbach's Researches on Magnetism. The high reputation of the author, as well as that of his learned translator and annotator, Professor Gregory, who has furnished a condensed view of the subject in an English dress, were all calculated to produce an effect—the greater, because the subject discussed was represented as bringing under our notice a new imponderable, through which we should realise a clear and satisfactory solution of many problems in the mental and physical constitution of man, which had puzzled and perplexed alike the savage and the sage from the earliest ages.

The vast interest which the above named brochure has created, is evinced by the extent to which it has been quoted, referred to, and reviewed in our numerous periodicals. Nor is it devoid of interest to observe the various awards of these different authorities. Thus, one quotes at great length, and not only with seriousness sets down the whole as fully established, but, moreover, with much complacency exults in the proof thereby adduced of the correctness of all the most extreme views, he and other Mesmerists may have promulgated on certain points of this keenly debated science; whilst another writes a clever burlesque article holding up the whole speculation as worthy only of unsparing ridicule. Between these two extremes, again, we have every grade of approval or scepticism.

On the first announcement of Dr. Gregory's abstract of Baron Reichenbach's Researches on Magnetism, I lost no time in procuring a copy, which I perused with intense interest. I had not proceeded far, however, when my experience with hypnotic patients enabled me to perceive a source of fallacy, of which the Baron must either have been ignorant, or which he had entirely overlooked. From whatever cause this oversight had arisen, I felt confident that, however carefully and perseveringly he had prosecuted his experiments, and however well-calculated they had been for determining mere physical facts, still no reliance could be placed upon the accuracy of conclusions drawn from premises assumed as true, where especial care had not been taken to guard against the source of fallacy to which I refer—viz., the important influence of the *mental* part of the process, which is in active operation with patients during such experiments. I therefore resolved to repeat his experiments, paying the strictest attention to this point; and, as I had anticipated, the results were quite opposed to the conclusions of Baron Reichenbach. It is with considerable diffidence that I venture to publish an opinion opposed to such high authority; but I shall briefly state the grounds of my own opinion, and leave it to others to repeat the experiments, and determine which opinion is nearer the truth. The observations which I have to submit may, moreover, prove suggestive to others, and enable them not only to avoid sources of fallacy with which I am familiar, but may also lead to the detection of many which may have escaped my own observation.

The great aim of Baron Reichenbach's researches in this department of science has been to establish the existence of a new imponderable, and to determine its qualities and powers in reference to matter and other forces, vital and inanimate. It unfortunately happens, however, that the only test of this alleged new force (with one solitary exception, and that as I thought by no means a satisfactory one) is the human nerve; and not only so, but it is further admitted that its existence can only be demonstrated by certain impressions imparted to, or experienced by, *a comparatively small number of highly sensitive and nervous subjects.* But it is an undoubted fact that with many individuals, and especially of the highly nervous, and imaginative, and abstractive classes, a strong direction of inward consciousness to any part of the body, especially if attended with the expectation or belief of something being about to happen, is quite sufficient to *change the physical action of the part, and to produce such impressions from this cause alone, as Baron Reichenbach attributes to his new force.* Thus every variety of feeling may be excited from an *internal* or *mental* cause—such as heat or cold, pricking, creeping, tingling, spasmodic twitching of muscles, catalepsy, a feeling of attraction or repulsion, sights of every form or hue, odours, tastes and sounds in endless variety, and so on, according as accident or intention may have suggested. Moreover, the oftener such impressions have been excited, the more readily may they be reproduced, under similar circumstances, through the laws of association and habit. Such being the fact, it must consequently be obvious to every intelligent and unprejudiced person that no implicit reliance can be placed on the human nerve as a test of this new power in producing effects from *external* impressions or influences, when precisely the same phenomena may arise from an *internal* or *mental* influence when no external agency whatever is in operation.

In order to guard against this source of fallacy, therefore, I considered it would be the best mode to throw patients into the *nervous sleep*, and then operate on such of them as I knew had no use of their eyes during the sleep (for some patients have), and to take accurate notice of the results when a magnet capable of lifting fourteen pounds was drawn over the hand and other parts of the body *without contact*, after the manner described as performed by Baron Reichenbach in his experiments.

I experimented accordingly, and the results were, that in no instance was there the slightest effect manifested unless when the magnet was brought so near as to enable the patient to feel the abstraction of heat (producing a sensation of cold), when a feeling of discomfort was manifested, with a disposition to move the hand, or head, or face, as the case might be, *from* the offending cause. This indication was precisely the same when the armature was attached, as when the magnet was open; and in both cases, if I suffered the magnet to *touch* the patient, instantly the part was hurriedly withdrawn, as I have always seen manifested during the primary stage of hypnotism, when the patients were touched with any *cold* object. Now, inasmuch as patients in this condition generally, if not always, manifest their perceptions of external impressions by the most natural movements, unless the natural law has been subverted by some preconceived notion or suggested idea to the contrary, and as I have operated with similar results on a considerable number of patients, we have thus satisfactory proof that there was no real attractive power of a magnetic or other nature tending to draw the patient, or any of his members, so as to cause an adhesion between his body and the magnet, as between the latter and iron, as Baron Reichenbach had alleged. I conclude, therefore, that the phenomena of apparent attraction manifested in his cases were due entirely to a mental influence, and I shall presently prove that this is quite adequate to the production of such effects.

But I must now give an extract, so as to state Baron Reichenbach's views, as expressed in Professor Gregory's abstract. "Magnets of 10lbs. supporting power, when drawn along the body, without contact, produce certain sensations in a certain proportion of human beings. Occasionally, out of twenty, three or four sensitive individuals are found; and in one case, out of twenty-two females examined by the author, eighteen were found sensitive.

"The sensation is rather unpleasant than agreeable, and is like an *aura:* in some cases warm, in others cool; or it may be a pricking, or the sensation of the creeping of insects on the skin; sometimes headache comes on rapidly. These effects occur when the patient does not see the magnet, nor know what is doing; they occur both in males and females, though more frequently in females; they are sometimes seen in strong, healthy people, but oftener in those whose health, though good, is not so vigorous, and in what are called nervous persons. Children are frequently found to be sensitive. Persons affected with spasmodic diseases, those who suffer from epilepsy, catalepsy, chorea, paralysis, and hysteria, are particularly sensitive. Lunatics and somnambulists are uniformly sensitive. The magnet is consequently an agent capable of affecting the living body. The object of the author is to solve some of the disputed questions, and to bring a number of phenomena under fixed physical laws.

"Healthy sensitive subjects observe nothing farther than the sensations above noticed, and experience no inconvenience from the approach of magnets; but the diseased sensitive subjects experience different sensations, often disagreeable, and occasionally giving rise to fainting, to attacks of catalepsy, and to spasms so violent that they might possibly endanger life. In such cases, which generally include somnambulists, there occurs an extraordinary acuteness of the senses; smell and taste, for example, become astonishingly delicate and acute; many kinds of food become intolerable, and the perfumes most agreeable at other times become offensive. The patients hear and understand what is spoken three or four rooms off, and their vision is often so irritable, that, on the one hand, they cannot endure the sun's light, or that of a fire; while, on the other, they are able, in very dark rooms, to distinguish, not only the outlines, but also the colours of objects, where healthy people cannot distinguish anything at all. Up to this point, however strange the phenomena, there is nothing which may not easily be conceived, since animals and men differ very much in the acuteness of the senses, as is daily experienced."

Having met with a patient, Mdlle. Nowotny, who was subject to catalepsy, who possessed such a high degree of acuteness of the senses, that "she could not endure the daylight, and in a dark night perceived her room as well lighted as it appeared to others in the twilight, so that she could quite well distinguish colours;" from a consideration of this circumstance, and remembering that the aurora borealis appears to be a phenomenon connected with terrestrial magnetism, or electro-magnetism, it occured to the Baron "that possibly a patient of such acuteness of vision might see some luminous phenomenon about the magnet."

"The first experiment was performed by the patient's father;" no doubt by the suggestion of the Baron, and with the idea conveyed to him that some luminous appearance was likely to be discovered by the patient. It would be interesting to know whether the patient had not also been led, by some means, to understand the object of the inquiry, as such expectation, according to my own experience with such subjects, was quite adequate to the production of the expected phenomenon; and, moreover, once realised, *it would be liable to occur ever after, under the same combination of circumstances.*

"In profound darkness, a horse-shoe magnet of nine elements, capable of carrying 80lbs., was presented to the patient, the armature being removed; and she saw a distinct and continued luminous appearance, which uniformly disappeared when the armature was applied.

"The second experiment was made on her recovery from a cataleptic attack, when the excitability of her senses was greatest. She saw two luminous objects, one at each pole (the magnet was open), which disappeared on joining the poles, and reappeared on removing the armature. At the moment of breaking contact, the light was somewhat stronger. The appearance was the same at both poles, without any apparent tendency to unite. Next to the metal, she described a luminous vapour, surrounded by rays, which rays were in constant shooting motion, lengthening and shortening themselves incessantly, and presenting, as she said, a singularly beautiful appearance. There was no resemblance to an ordinary fire; the colour of the light was pure white, sometimes mixed with iridescent colours."

The next patient "was far more sensitive to the magnet than the former. She declared that, at the moment the armature was withdrawn, she had seen fire rise from the magnet, the height of a small hand, white, *but mixed with red and blue.*"

Mdlle. Maix.—"As often as the armature was removed from a large magnet, in the dark, she instantly saw the luminous appearance above the poles, about a hand-breadth in height. But when affected with spasms, she was more sensitive, and the phenomenon increased in her eyes amazingly. She not only now saw the magnetic light at the poles much larger than before, but she also perceived currents of light proceeding from the whole external surface of the magnet, weaker than at the poles, but leaving in her eyes a dazzling impression, which did not for a long time disappear."

"Mdlle. Barbara Reichel saw the magnetic light not only in the dark, but also in such a twilight as permitted the author to distinguish objects, and to arrange and alter the experiments. The more intense the darkness, the brighter and larger she saw the flaming emanations; the more sharp and defined their outline, and the more distinct the play of colours." In the dark she saw the magnet giving out light, when shut, as well as when open, with this difference, that in the former case there were no points when the light appeared concentrated; but all the edges, joinings, and corners of the magnet gave out short flame-like lights, uniform in size, and in a constant undulatory motion. From the large magnet these were about as long as the thickness of a little finger; when the armature was removed, however, the light was concentrated at the two poles from which the flames arose to about the height of eight inches and a half, rather broader than the bar. At each depression, where two plates of the magnet were laid together, there appeared smaller flames ending in point-like sparks on the edges and corner. These small flames appeared blue, the chief light was white below, yellow higher up, then red and green at top. It was not motionless, but flickered and undulated, or contracted by starts continually, with an appearance as of rays shooting forth. There was no appearance of mutual attraction, or mutual tendency towards each other of the flames, or from one pole to the other; and as in the case of Mdlle. Nowotny both poles presented the same appearance."

Mdlle. Reichel tested with a straight magnet. "At the pole pointing to north, or negative end of the magnet, the flame was larger than at the opposite end; it was sometimes undulating, sometimes startling, and shot out rays as in the horse-shoe magnet; it was red below, blue in the middle, green at top."

In order to enable the reader to form a correct estimate of what is represented in these several narratives, I have quoted the more important parts verbatim; and by comparing the results recorded by the different patients, no one can fail to be struck with their remarkable discrepancy in their description of what has been alleged as a physical fact. All expected, as I presume, to see light, and they saw light or flames accordingly; but let us remark another result: Mdlle. Nowotny, in her most sensitive state, saw luminous vapour surrounded by rays which were in a constant shooting motion. "The *colour* of the light was nearly *pure white, sometimes* mixed with iridescent colours." The appearance was the same at *both* poles; the length of the flames, about one-half or three-fourths of an inch. Mdlle. Maix, in her ordinary state, saw flames (from the same magnet, I presume) a hand breadth in height, but when in the more sensitive state they were much larger; and she now saw currents of flame proceeding from the whole external surface of the magnet, but weaker than at the poles.

Mdlle. B. Reichel saw the magnet giving out light, not only when open, but also when closed. When open, the flames from the poles were about eight inches high, those at the joining of the plates of the magnet about a finger's breadth in length. "These *small flames* appeared blue, the *chief light* was *white below, yellow higher up, then red, and green at top.*" As with the others, *both* poles seemed to have given out *similar* appearances of light and flame. This same patient being experimented on with the above straight bar magnet, about a foot and a half long, we are told that, "*at the pole pointing to north,* or negative end of the magnet, the flame was *larger* than at the *opposite* end;" and we are further told that, "it was *red below, blue in the middle,* and green at top." When we advance to the flames seen to be given out by crystals, from the human hand, and other forms of matter, we have equally discordant descriptions as to *colour* and *size* of flames as seen by different sensitive subjects. Now, to my mind, these discordant statements, as to the *colour* of the flames are quite fatal to the notion of such representations proving a physical fact; and in an especial manner is that remark applicable to the statement of Mdlle. Reichel, who not only saw the *colour* different which was emanating from a *straight* bar magnet from that of the horse-shoe variety, but also described the *size* of the flame as *larger* from the *north* pole of the straight bar magnet than from the other end, whereas it was always seen by her, as well as by others, to be the same size at *both* poles of a *horse-shoe magnet.* If there be a physical reality in these alleged flames and colours, there ought to be no discrepancies of this sort, and the fact of such discordant statements having been made will tend to prepare the mind of the reader for the solution of the problem which I have now to submit.

In prosecuting the inquiry, Baron Reichenbach considered he had not only proved the existence of this new force, which produced all the physical effects enumerated, with streams of light from the poles, and the power of attracting the human body, and adhering to it, as steel to the magnet—I say he alleged that he had established such a force, not only as residing in the magnet, in addition to the ordinary magnetic force, but moreover, that it was found equally active in crystals, where it existed quite pure and distinct from ordinary magnetism. He also now ascertained that his subjects could discover "that from the finger points of healthy men, fiery bundles of light streamed forth, exactly as from the poles of magnets and of crystals visible to the senses." He alleges, moreover, that he had proved that where it was passive, it could be excited into activity by the sun's rays, by the moon's rays, by starlight, by heat, by chemical or mechanical action, and finally, that this luminous or phosphorescent appearance, and certain other peculiar properties, might be discovered by the highly sensitive in almost every place, and from nearly every object or form of matter, solid or fluid, animate or inanimate. Also, that it could be conducted through all other matter, and that all substances, not naturally actively charged with it, could be so temporarily, by proximity and contact of those which were actively charged.

I have already stated the wonderful power of the human mind, when inward consciousness is strongly directed to any part of a sensitive person, in changing physical action, and leading the subject to attribute to an *external* cause what may have arisen entirely from an *internal* or *mental* cause. It has also been stated that, when I resorted to a mode of operating which rendered the subjects more highly sensitive to external influences, and at the same time calculated to obviate any source of fallacy, as to mental emotion or expectation being directed to the part from their seeing what was being done, the results were in direct opposition to what was represented as having been realised by the Baron. I have particularly adverted to this in respect to the alleged attraction of the magnet for the human frame; I have proved it to be equally so in respect to the human hand, and crystals, &c., *where all sources of fallacy are guarded against.* In my experience, moreover, with such cases, no light or flames have been perceived by patients either from the poles of a magnet, crystals, the points of the fingers, or other substance, unless the patients have been previously penetrated with some idea of the sort, or have been plied with such questions as were calculated to excite notions, when various answers were given accordingly, and when in the sleep there appeared an equal aptitude to see something *when neither magnet nor fingers were in the direction indicated, as when they were*—a clear proof that the impressions were entirely imaginary.

I shall now proceed to detail the results of experiments with patients when wide awake, and when they had an opportunity of seeing what was being done, and expected something to happen; and also when the same patients saw nothing of what was doing, but supposed I was operating, and consequently expected something to occur.

With nearly all the patients I have tried, many of whom had never been hypnotised or mesmerised, when drawing the magnet or other object slowly from the wrist to the points of the fingers, various effects were realised, such as change of temperature, creeping, tingling, pricking, spasmodic twitching, catalepsy of the fingers, or arm, or both; and reversing the motion was generally followed by a change of symptoms, from the altered current of ideas thereby suggested. Moreover, if any idea of what might be expected existed in the mind previously, or was suggested orally, during the process, it was generally very speedily realised. The above patients being now requested to look aside, or a screen having been interposed, so as to prevent their seeing what was being done, and they were requested to describe their sensations during the repetition of the processes, similar phenomena were stated to be realised, even when there was nothing whatever done, beyond watching them, and noting their responses. They believed the processes were being repeated, and had their minds directed to the part, and thus the physical action was excited, so as actually to lead them to believe and describe their feelings as arising from *external* impressions.

The above fact was most remarkably evinced in a young gentleman, twenty-one years of age. I first operated in this manner on his right hand, by drawing the powerful horse-shoe magnet over the hand, without contact, whilst the armature was attached. He immediately observed a sensation of cold follow the course of the magnet. I reversed the passes, and he felt it *less cold*, but he felt no attraction between his hand and the magnet. I then removed the cross-bar, and tried the effect with both poles alternately, but still there was no change in the effect, and decidedly no proof of attraction between his hand and the magnet. In the afternoon of the same day I desired him to look aside and hold his hat between his eyes and his hand, and observe the effects when I operated on him, when he could not see my proceedings. He very soon described a recurrence of the same sort of sensations as those he felt in the morning, but they speedily became more intense and extended up the arm, producing rigidity of the member. In the course of two minutes this feeling attacked the other arm, and to some extent the whole body, and he was, moreover, seized with a fit of involuntary laughter, like that of hysteria, which continued for

several minutes—in fact, until I put an end to the experiment. His first remark was, "Now this experiment clearly proves that there must be some intimate connection between mineral magnetism and Mesmerism, for I was most strangely affected, and could not possibly resist laughing during the extraordinary sensations with which my whole body was seized, as you drew the magnet over my hand and arm." I replied that I drew a very different conclusion from the experiments, for *I had never used the magnet at all*, nor held it, nor anything else, near to him, and that the whole proved the truth of my position as to the extraordinary power of the mind over the body, and how mental impressions could change physical action.

I operated on two other gentlemen the same day, who were much older, and with decidedly marked effects in both, though less so than in the last case. The experiment being tried with a lady of fifty-six years of age, by drawing a gold pencil-case slowly from the wrist to the finger-ends, a creeping, twitching sensation was felt, which increased until it became very unpleasant, and excited a drawing, crampy feeling in the fingers of that hand. On causing her to look aside, watch, and describe her feelings during my subsequent operations, the results were similar, and that whilst I had done nothing; and the whole, therefore, was attributable to the power of the mind in changing the physical action.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS PANSON, Esq., of St. George's Hospital.

MEDICAL CASES.

CASE V.

CASE OF CONTINUED FEVER (TYPHUS).

John Williams, aged twenty-nine, mechanic, admitted by Dr. Nairne.

June 16.—Face suffused and dusky; aspect dull and stupid; eyes suffused; skin warm; tongue furred, but moist; pulse 108, large, soft, and compressible.

The patient lies on his back in bed, with low, muttering delirium; he does not answer when spoken to, and is very unwilling to show his tongue. There is a small, round, rosy eruption, not elevated above the level of the skin, thickly studding the chest and abdomen; a few spots are also observed on the arms.

The abdomen appears full; but his countenance does not indicate suffering, on pressure being made on it.

His friends state that he had not appeared well for nearly a fortnight, and that five days ago he was obliged to give up work, "from headach and weakness," that he had been gradually getting worse, and became delirious last night.

Ordered Hyd. chlorid., gr. iij ter in die; Haust. ammon. citrat. cum sp. æther. nit., ℥j 6tis horis. Beef tea.

17.—He obtained no sleep last night, but was very delirious; frequently trying to get out of bed; and alternately laughing and crying. The eyes are more suffused; the scalp not hot; tongue still furred and dry; pulse 120, small and weak; skin generally warm, but feet cold; the spots on the abdomen are fading; but the arms are more thickly studded; pressure on the region of the cæcum causes slight shrinking; he has had one motion, which was passed in bed, and is described as being of a light mottled colour; his urine is also passed unconsciously.

Perst. in rem. Appl. emp. lyttæ nuchæ; Vin. ibri, ℥ vj quotidie.

18.—He became calmer last night soon after the blister began to rise, and slept several times during the night. His countenance is more natural, and he answers questions to the purpose. Has no pain in the head; and lies on his side. Tongue moist and cleaner; pulse 96, fuller. Has passed a large quantity of high-coloured urine. Gums rather swollen; abdomen is not tender; but bowels not freely open.

Rep. pil. calomelanos bis die tantum; Ol. ricini, ℥iv statim. Perst. in aliis.

19.—Slept well last night; countenance natural; pulse 98, fuller; tongue moist; has no pain in abdomen; bowels open; motions firm and of a natural colour. Urine passed copiously. Perst.

20.—Slept well; pulse 92, full and firm; the petechiæ have disappeared from the surface of the body. Bowels open; skin warm; urine clear and copious.

Omit. pil. et haust.

22.—Pulse 82, of good strength; has an appetite; bowels not well-opened.

Haust. sennæ cras mane.

24.—Pulse natural; tongue clean and moist. Complains only of weakness. Is very hungry.

Half ordinary diet.

27.—Appetite good; pulse natural; is gaining strength.

Ordinary diet. Porter, instead of wine.

August 6.—Perfectly recovered. To go out tomorrow.

REMARKS.

Continued fever has been divided into three great leading varieties, according to the predominance of certain of the symptoms over others; not that in reality a distinct line of demarcation can be drawn in every case; but by taking the leading symptoms only, the distinction will be found sufficiently marked.

The first variety is that in which inflammatory symptoms predominate, and to which the name of *synocha* is given. It generally commences abruptly, with a short stage of oppression, followed soon by pain and weight in the limbs and back, with shivering and a small pulse. In a few hours the pulse becomes hard and frequent; the tongue dry and furred; skin hot; urine red and scanty; with thirst; intolerance of light and sound. Delirium is seldom present, but there is extreme restlessness and anxiety. These symptoms may terminate abruptly in a few days, in concurrence with some critical discharge from the skin, kidneys, or mucous membrane of bowels. Or it may disappear slowly without any marked increase of the excretions. But if it should last longer, there is a great tendency for it to pass into the next form. Synocha was the prevailing form of epidemic which extended over the larger part of Great Britain between the years 1817-20. Since that time it has been much less observed.

Synochus generally commences abruptly; it appears to be a compound of synocha and typhus; it usually presents the inflammatory stage of the first variety, but of much shorter duration, passing perhaps in the beginning of the second week into the low or typhoid type. It is perhaps the most frequent form of fever; however, many cases have so short an inflammatory stage, that it is doubtful whether they should belong more to this or the next form.

"In *typhus* the nervous or adynamic symptoms are the characteristic features from first to last. It has been well-defined to be "a fever characterised by a frequent, compressible pulse, little increase of the animal heat, extreme languor and debility, and much disturbance of the mental functions."

In most cases it begins gradually with languor, slight headach, loss of appetite, inability for exertion. In a day or two a rigor is observed, then the pulse becomes quick, full, perhaps jarring, but always compressible. The tongue is white, with papillæ enlarged; the skin perhaps not above the natural standard; a great feeling of exhaustion; the bowels perhaps constipated; countenance dark, dull, and oppressed; eyes injected; ideas confused; ringing in the ears; sleep disturbed. When these symptoms have lasted for a longer or shorter time—the general average being about a week—a gradual change will be observed. The tongue will become brown and dry; sordes perhaps will appear on the teeth; weakness and watchfulness increase. Pulse more soft and compressible, ranging from 90 to 110; unequal distribution of the heat of the surface, the extremities perhaps being cold. Now the mind becomes affected; at first this is seen only by occasional muttering and incorrect answers; next by constant talking, and a tendency to roam about. These symptoms are said to undergo a slight exacerbation every evening, and become less marked towards morning; this is generally best seen in the delirium; with regard to the others it is not so cognizable.

If the disorder is to terminate fatally, the tongue becomes drier and darker; the pulse more feeble; and the delirium changes into deep coma. There is subsultus tendinum, hiccup, and involuntary relaxation of the sphincters. This change is generally observed towards the end of the second week. Occasionally death by asthenia or syncope takes place, though more rarely than that by coma. Death by apnœa, combining with the coma, may happen, if there be secondary pulmonic inflammation.

But if the termination is to be favourable, the pulse becomes fuller and less frequent; the tongue cleaner at the edges, and moist; delirium milder, occurring only at intervals; the expression of countenance more natural; the stupor disappears; longer intervals of sleep are obtained; and the natural appetite and strength gradually and slowly return.

Crisis, or the beginning of amendment, or the turn of fever, generally occurs during the second, or beginning of the third week. The ancients had great faith in, and looked with much interest to, critical days; it is a point disputed by some in the present time, but generally believed.

Dr. Welsh observed a large number of cases in the Edinburgh epidemic of 1819, and he gives us a long number of critical days; from 3 to 11, every second is critical; from 11 to 20, every third is critical; but by far the greater number of cases "took the turn" on the 7th. It is a curious fact that, in Good's Study of Medicine, these very days are spoken of as those observed by Hippocrates.

Crisis is said to be much more marked in warm than in temperate or cold countries. Such may be called a sketch of *pure* continued fever, as it occurs when uncomplicated with a secondary affection; but in reality it is seldom found in practice so uncomplicated. The different forms of fever are found so constantly associated with secondary affections, that some physicians have even thought that the fever was only secondary to the local affection; but this is now generally acknowledged to be incorrect, because fever is often present without such local inflammation; also in synocha, where we should expect most local inflammation, it least frequently occurs. The local affection also shows itself often after the fever is fully formed; it may also disappear while the fever is unabated, or the fever may disappear while the local inflammation still continues.

The symptoms of typhus were well marked in our patient; he had evidently been drooping for some days before he was regularly attacked. At last the onset of the disease was announced by headach, and as his friends said "weakness," by which must be understood a sensation of lassitude and extreme weariness, from the depression of the nervous energies. The jarring pulse, furred tongue, with elevated papillæ, were also very characteristic of irritation, but the secondary affections under which he laboured formed the most marked features of the disease; and of these, the most prominent was that of the head.

This is one of the most frequent concomitants of typhus, and must be referred to the depressed state of the nervous system. There was evidently congestion of the brain and its membranes, as evinced by the dusky redness of the face, injected eyes, stupor, muttering delirium, and coldness of the extremities. Sometimes these symptoms assume so aggravated a form as to give rise to the suspicion of inflammation within the cranium; however, our patient showed very distinct marks from inflammation; his bearing was not morbidly acute; countenance not wild; eyes not bright, as in phrenitis; and had the patient died, we might have found the sinuses and large vessels gorged, but hardly capillary injection or effusion of lymph.

In the abdomen, also, were symptoms of a morbid affection. Perhaps disease is as frequently, or nearly so, met with here, in fever, as in the head; but it has been observed more especially in France, where, indeed, it has been assigned as the primary cause of fever, and to be a true inflammation. This doctrine is not upheld by British writers, because fever is sometimes present without abdominal

symptoms; and when they do occur they appear secondarily, and yield easily to treatment. The symptoms in the present case led to the inference that there was probably irritation and congestion of the intestinal mucous membrane; there was fulness and tension in the abdomen, slight tenderness, and an anxious countenance. From the tenderness in the right iliac region, it is possible that there was some irritation of the glands of Peyer and Brunner: but not inflammation and ulceration of them, forming the dothinenteritis of the French writers; when it proceeds to this extent there is generally, in addition to the above symptoms, a yellow watery diarrhœa, a red chapped tongue, and vomiting; the typhoid oppression is also extreme.

Perhaps there might have been slight congestion of the liver; but the symptoms of this complication are always obscure, unless indeed when it causes jaundice, when the disease generally terminates fatally.

Petechiæ was another of our patient's complications. This was more observed some years ago than at the present time; indeed at that time the disease was called spotted fever. Writers on the subject, caution us against mistaking these spots for flea-bites, and indeed the resemblance is very great; but the non-appearance of a dark speck in the centre is sufficient to distinguish them. Their appearance is owing to a slight extravasation under the cuticle, which generally takes place at the commencement of the attack, and is thought to be indicative of a degree of force in the circulation. Louis says that they always occur in conjunction with the intestinal disease; but such is not found to be invariably the case in this country.

If we may rely on the statement of the patient's friends, as to the period of the invasion, we shall find that the crisis or turn took place on the seventh day, at the same time as the greater number of Dr. Welsh's happened.

The cause of continued fever is generally believed to be the decomposition of human effluvium, an animal poison in fact, which when taken into the blood, is capable of reproducing itself by a chemical process, as Professor Liebig has shown, analogous to the fermentation of sweet-wort by yeast; and of declaring its presence after a longer or shorter time, according to circumstances, by a set of symptoms which we call "fever." This disease, when it is once established, is capable of communication from one person to another, according to their proximity to the patient. This liability to infection seems to obey certain rules, of which the following are the principal:—

That long exposure is necessary to produce it; that the poison is not active or virulent, as the vulgar imagine, for cleanliness and ventilation are sure safeguards. But when these are neglected it spreads with great rapidity, as we constantly see in crowded dirty habitations. One single exposure is not sufficient to induce the attack, but it requires long and constant exposure. If the person has had a previous attack, it requires still longer exposure to receive a second infection. The infirm generally suffer sooner than the robust, and convalescents from other diseases also are extremely liable, though they are not so during the disease itself. Mental emotion, cold, fatigue, distress; in fact, anything which has a tendency to depress the sensorial powers, makes the poison act with greater readiness.

The prognosis in the present case, from the type alone, was of course not so favourable as if it had been synocha; but the most important points of the prognosis were drawn from the symptoms. From the little evidence which we could obtain of there having been much reaction at the outset, and from the early predominance of the typhoid symptoms, a guarded opinion was entertained. The most unfavourable symptoms were the weak, soft, jarring pulse; its extreme frequency; coldness of the extremities; a brown and dry tongue; injection of the face and eyes; decubitus on the back; stupor and muttering delirium; involuntary discharge of urine and fæces. The appearance of the petechiæ was more favourable than if they had been large, diffuse, and irregularly circumscribed.

The above unfavourable symptoms happily in a short time began to give way to more favourable ones; the pulse became less frequent, and fuller; the delirium disappeared; natural sleep returned; the tongue became moist at the edges, and cleaner; the posture was changed from the supine to the lateral; the evacuations ceased to be involuntary. Other secondary points of prognosis were the *age* of the patient; it is found in large epidemics that the younger the patient, the more favourable may be the opinion. As to *sex*, it is much more unfavourable on the male than the female side; after the age of twenty; this is said to be owing in a great measure to their more frequent habits of intoxication. As far as *constitution* is concerned, it was favourable to our patient, for he was tolerably robust, and had not lately been suffering from any other disease.

The treatment of fever differs greatly according to the presence of one or other of its types. If synocha be present, antiphlogistic; and if typhus, stimulant remedies are more required. This general rule, however, must not lead to the prescribing for the type without reference to the symptoms. This indeed has been the great stumbling-block in former times, causing physicians to prescribe and recommend certain remedies to the exclusion of all others. The proper way to avoid error will be to attend diligently to the indications of cure, and to "obviate the tendency to death," whether it be by coma, syncope, or apnœa.

The general plan of treatment in fever—bearing in mind that we cannot cut the disease short, and can only lead it to a favourable termination—consists, at the commencement, in mitigating reaction; in the second stage, in supporting exhaustion; and during convalescence, in restoring strength and preventing relapse: and at any time, secondary special symptoms may arise, which will require combating, at the same time as, and often in a very different direction to, the general treatment.

On our patient's admission the most prominent symptoms were those of exhaustion; therefore citrate of ammonia was given, with beef-tea for diet. But there was also reason to imagine that some entero-mesenteric congestion was present; and mercury was accordingly given, not so much for its specific effects on the system at large, as, by its stimulant effects on the whole intestinal mucous surface, to rouse the capillary vessels to action, and enable them to throw off the congestion. Some contrariety of opinion exists at the present day about the administration of mercury in fever; its good effects were, however, plainly seen in the present case, by its increasing the secretion of bile, and gradually altering the quality of the stools from a light colour and offensive odour to a natural condition. On the second day after his admission the depression was found to have increased, and also the congestion of the head, which it had been thought before would have yielded to the treatment employed; a necessity for wine seemed now sufficiently indicated, and it was accordingly ordered; and counter-irritation to the back of the neck, to relieve the congestion in the head; in a few hours, a most marked and favourable change was observed. Now, although these remedies were most judiciously administered, and such a marked effect followed, yet it would be imprudent to say that the change was entirely owing to them; and that nature would not have accomplished it without their aid; for we constantly see, before the crisis in fever, a marked aggravation of the attack. Such, consideration, however, must never prevent our using proper remedies, or leaving nature to do her work alone.

The only point of interest in the treatment during convalescence was, that he was only allowed to return to a substantial diet very gradually, for fear of a relapse.

We learn by the *Annales de Therapeutique* that M., Pugliatti, professor of clinical surgery at Messina, presented a memoir at the late scientific congress held at Naples, in which he stated that by applying compresses, wetted with chemical reagents, to the neighbourhood of the orbit, an effect may be produced on the deep structures of the eye. Among other assertions, M. Pugliatti affirms that ammonia applied in this manner softens the crystalline lens when opaque, and after a time causes its absorption. Several months' treatment are, however, necessary to obtain this result.

TRANSACTIONS OF LEARNED SOCIETIES.

PATHOLOGICAL SOCIETY OF DUBLIN.

Meeting of the 11th April, 1846.

[From our own Correspondent.]

Mr. Adams in the Chair.

Dr. Mayne wished, he said, to call the attention of the Society to two cases of exceedingly acute arachnitis which had come under his observation during the previous fortnight. He considered them interesting in this respect, that the symptoms in both were very nearly similar during life, and that in the post-mortem appearances also there was a corresponding similarity. The cases, too, had run a very rapid course, being but little influenced by treatment.

The subject of the first, a boy of four years old, had been for a length of time an inmate of the South Union Poor House, and had never complained of any illness until the 24th of March. In the early part of the day he was as well as the other children, and ate his dinner heartily; towards evening, however, he was suddenly seized with pain and uneasiness in the abdomen, and was soon afterwards attacked with vomiting. He continued very uneasy all that night, constantly calling for cold drinks, which were no sooner swallowed than rejected again by the stomach. On seeing the boy next morning, Dr. Mayne was struck with his appearance: his countenance had much of the tetanic expression in it, the features being strongly marked and the lines of the face considerably more distinct than they usually occur in so young a child. The head was thrown back upon the vertebral column, the occiput being retracted upon the spine and firmly fixed in that position. Many of the muscles of the body, but particularly those of the back of the neck, were rigid. The lower extremities were remarkably stiff and semi-flexed. When placed erect, the boy could not preserve his equilibrium a moment, all voluntary power of the muscles being lost. He was still vomiting, and there was extreme tenderness over the epigastric region, but without any swelling of the abdomen. Upon questioning him, he said he felt no pain in his head; there was no congestion of the conjunctiva, nor strabismus; no heat of the scalp or other symptom of cerebral disease. At this period Dr. Mayne felt some doubts as to the exact nature of the case; the extreme tenderness of the abdomen and the obstinate vomiting resembled gastritis, while the rigid condition of the muscles at large seemed to show that the nervous centres were in fault.

The head was shaved, enemata were administered to free the bowels, and the boy was put upon small doses of mercury.

Next morning it became still more evident that the nervous centres were the seat of disease, the pulse, which was before 130, having now come down to 60; the patient was moaning; he had been vomiting all the night, and was now in a state of partial stupor; the head was still forcibly drawn back upon the spine, and whatever he drank was thrown up immediately. Leeching the head and blistering produced no benefit, and on the third day he was still worse. During the next night severe general convulsions set in, the severity of which was such that the nurse was unable to hold him, and Dr. Mayne at his visit on the fourth morning found him strapped down in bed to guard him from injury. The extremities subsequently became perfectly cold, together with the other usual symptoms of the last stage of cerebral disease, and he died on the fourth day.

The autopsy revealed many of the appearances of acute arachnitis: there was considerable congestion of the pia mater investing the hemispheres of the brain, and a dry feel of the arachnoid membrane itself, *beneath* which was a considerable quantity of lymph, particularly along the base of the brain, every one of the cerebral nerves at their origins being immersed in it. On cutting down to the spinal marrow also, it was found to be extensively covered with the same material.

On reflecting upon all the circumstances of this case, Dr. Mayne said he felt some regret that more energetic measures had not been taken in the commencement to combat the disease.

In about three days afterwards the second case—a precisely similar one—occurred in the person of a boy, aged nine years, from whom the specimen on the table was removed. He was seized on the 30th of March with very nearly the same train of symptoms as the other. After he had eaten a hearty dinner he got violent pain in the stomach, and soon vomited. The disease was at once recognised as identical with the first case. The head was thrown back in the same position, and the countenance presented much the same expression. The muscles of the extremities were not so stiff as in the former case, but those of the neck were quite as rigid, and the sickness of stomach and other symptoms were equally well marked.

Dr. Mayne was determined to lose no time with this case. A vein was first opened in the arm, and as it bled but indifferently, the jugular was punctured, and blood allowed to flow in a full stream until the boy was almost fainting, but notwithstanding the most energetic antiphlogistic treatment; viz., shaving the head, leeching, sinapisms, and calomel every second hour, he fell into a partially convulsed state on the second day. The paroxysms became more violent on the third; finally, the extremities grew perfectly cold, and he died on the fourth day of the attack. The mercury told upon the system about the third day, as evidenced by the nitrate of silver look of the gums, but the bowels soon gave way, and the discharges for the last few days of life were involuntary.

On examination, very nearly the same proofs of violent arachnitis were discovered, and the effects of the inflammation were traceable down to the very bottom of the vertebral canal.

[A very well executed drawing of the morbid parts, done by Mr. Conolly, was then exhibited to the Society.]

The arachnoid membrane lining the dura mater and upper surface of the brain was dry, as in the former case; and in the sulci, as well as at the base, there was an immense quantity of yellow lymph, in which the cerebral nerves were imbedded; in fact, everywhere at the base of the brain and cerebellum this morbid product lay in great quantity between the arachnoid and pia mater. The spinal marrow from top to bottom was also enveloped in lymph, even to the divisions of the cauda equina.

Dr. Mayne then proceeded to investigate the condition of the nervous centres themselves. The pia mater covering the cord was quite free from congestion, and the medullary matter itself had no appearance of inflammation, or trace of ramollissement. He had not examined the substance of the brain in the *present* case, lest the drawing should have been injured, but he did so most carefully in the *first*, and in it there was no trace of inflammation of the medullary substance, nor was there any effusion into the ventricles, or unusual number of bloody dots on cutting the cerebral substance. These cases Dr. Mayne considered remarkable in many points of view, first, for the very extensive *cerebral* arachnitis, second, its co-existence with inflammation of the same membrane in the spinal marrow, and the copious deposition of lymph which was everywhere found in the *sub-arachnoid* tissue. Then there were the retraction of the head and rigidity of the muscles of the extremities, added to the tetanic expression of countenance, constituting altogether an assemblage of symptoms almost pathognomonic of the disease; at least he found no difficulty whatever in deciding upon the nature of the second case, after having seen the symptoms in the first. Another remarkable feature in the disease was its exceedingly intractable character, for whilst it was a subject of regret to himself that more active measures had not been pursued in the first case, he found that in the second—which was treated most energetically—all the measures usually adopted for subduing serous inflammation having been rigidly put in practice from the commencement, all was of no avail. The affection was not, in in the slightest degree influenced by treatment.

Dr. Darby, he remarked, had lately brought under the notice of the Surgical Society some cases that had occurred in the Rathdown Poor-house, in which there were evidences of arachnitis similar to those here described, but the dissection had not been carried to the spinal canal.

The rigidity of the extremities in Dr. Mayne's cases appeared, he thought, to point to the spinal marrow as the principal source of their peculiar symptoms. Dr. Darby was of opinion, he said, that the disease was a new one, and that the cases were but the commencement of an epidemic. All the circumstances, however, were, he thought, exceedingly curious, not the least of which was the occurrence of the disease in the workhouses alone, and all in the same class of patients—little boys, in whom it had proved almost as fatal with Dr. Darby as in the instances just now detailed.

Dr. Harrison presented a section of the left knee-joint of an elderly man, which exhibited in a very marked manner anchylosis between the three bones which constitute this articulation—the femur, tibia, and patella. This change was consequent upon the disease termed white swelling, which had existed about twenty-five years since. At the period this individual had suffered a severe and protracted illness for upwards of two years, but ultimately recovered his health and strength, as also considerable power of the limbs, and was enabled to pursue an active life and laborious occupation. The leg was about two inches shorter than the right, and the joint was perfectly stiff; the muscles of the limb generally were plump and strong, but the calf of the leg, as in all such cases, remained elongated and flattened. On Monday last this man was thrown from a car, and sustained a severe compound fracture of the leg; immediate amputation of the limb above the knee was deemed necessary, and performed. The dissection of the joint exhibited not only a perfect bony anchylosis, but also that peculiar displacement or dislocation which occurs slowly in disease of this joint, and which also occasionally occurs in similar diseases in other joints. The bones of the leg, during the long confinement of the patient, fall backwards, while the femur is drawn forwards, in general with a slight obliquity inwards; in this instance, however, it was strictly parallel to the tibia. The fibula was anchylosed to the tibia, but not to the femur. The anchylosis was perfect, the boundary lines of the several bones having totally disappeared, and the cancellated structure of each become continuous as if fused into one. The ligaments had all disappeared, and a firm yellow adipose tissue occupied their place.

CIRRHOSIS OF THE LIVER, OR THE YELLOW, SMALL, GRANULAR LIVER, FOUND IN A BOY, AGED SEVENTEEN.

Dr. Adams said a boy of the above age had been brought to the Richmond Hospital about fourteen days ago, having been found by the police in the streets in a dying state; he could give no account of himself, and no friend accompanied him to give any history of him. He seemed greatly exhausted, and was merging into coma; there was some fluid in the abdomen. About a week ago he died, and, on making a post-mortem examination, there was found, besides a quantity of yellow serum in the abdomen, the specimen of cirrhosis of the liver, of which the accurate drawing by Mr. Conolly that Mr. Adams held in his hand, gave a better idea than the specimen itself, which was somewhat altered by time and dissection. Were none but rare specimens to be exhibited at the meetings of the Society, the present, Mr. Adams observed, ought not to be presented, this being a very common disease of the liver, but it must be admitted that it is rarely found except in adults. Dr. Baillie says of the disease that it is hardly ever met with in *very young persons*, but frequently in persons of middle or advanced age, and in dram drinkers, and it is likewise more common in men than in women." This disease of the liver, Mr. A. observed, which is *now* commonly called cirrhosis of the liver, particularly by the French after Laennec, is well described by Dr. Baillie, who, however, has committed the error of calling the disease tubercles of the liver. But the rounded masses we find on the surface and in the interior of the surfaces (Mr. Adams remarks), in no respect, except in form, resemble *tubercle*.

Mr. Adams here read the following passage from Dr. Baillie's work, which, he said, would be found an accurate description of the appearances presented by the specimen before the Society:—

"The tubercles which are formed in this disease occupy, generally, the whole mass of the liver, are placed very near each other, and are of a rounded shape. They give an appearance everywhere of irregularity to its surface. When cut into, they are found to consist of a brownish or yellowish white solid matter. They are sometimes of a very small size, so as not to be larger than the heads of large pins; but most frequently they are as large as small hazel-nuts, and many of them sometimes larger. When the liver is thus tuberculated, it feels much harder to the touch than natural, and not uncommonly its lower edge is bent a little forwards. Its size, however, is generally not larger than in a healthy state, and I think it is often smaller. If a section of the liver be made in this state, its vessels seem to have a smaller diameter than they have naturally. It very frequently happens that in this state *the liver is of a yellow colour*, arising from the bile accumulated in its substance, and there is also water in the cavity of the abdomen, which is yellow, from the mixture of bile. The gall-bladder is *generally much contracted, and of a white colour*, from its being empty. The bile, from the pressure of the hard liver upon the pori biliarii, does not reach the ductus hepaticus, and therefore cannot pass into the gall-bladder. The colour of the skin in such cases is jaundiced, and it remains permanently so, as it depends on a state of liver not liable to change. This is the common appearance of what is generally called a *scirrhous liver*, but it bears only a remote resemblance to scirrhus, as it shows itself in other parts of the body. I should, therefore, be disposed to consider it as a peculiar disease affecting this viscus.

The liver in the specimen produced was somewhat less than natural, and, as usual, the diminution in size was principally observable in the left lobe. The surface of the liver was marked by numerous elevated granules, in the intervals of which were seen the membranous coverings of the liver, opaque and thickened; the gall-bladder was opaque and contracted, containing very little bile. The colour of the liver was yellowish, bordering on an obscure orange colour; some of the granules being as large as a hazel nut; others, the size of garden peas; many were miliary. These granules could be easily turned out from their cells by the handle of the knife without any dissection, and could be found to adhere merely by vessels to the rest of the organ. In one case of this disease which he had formerly communicated to the Society, he had found this spigelian lobe itself nearly isolated, a few vessels alone connecting it. When the liver is cut into we find that, independently of the granular bodies, there exists a very dense fibro-cellular tissue, which is not found in the natural state of the organ.

Laennec thought that what constituted the cirrhosis of the liver was a new tissue developed by disease, and that this peculiar morbid production cannot be found in other organs. Andral thought there was atrophy of the supposed red substance of the liver, and hypertrophy of the supposed yellow. But more modern researches seem to prove that the hepatic granulations in cirrhosis are not a newly-formed tissue, nor is there any disorganisation; for the sections of the granules, examined by the microscope, present the same spongy aspect as the surfaces of the sections of a healthy liver, the granules being penetrated—as there is a much greater quantity of bile than is usual. In cirrhosis we find bundles of large granulations, others extremely small, and a great quantity of fibrous tissue filling the intervals which they leave between them.

Cruveilhier is of opinion that cirrhosis consists essentially in an atrophy of the greater number of the granulations of the liver, and that the remaining number are hypertrophied as it were to supply the deficiency so arising.

Mr. Adams said he had omitted to mention, that in the case just produced the spleen was enlarged. He well remembered it to have been an observation of the late Mr. Todd when he demonstrated the morbid anatomy of the liver to his class at the College of Surgeons, his having remarked, that in his experience he had invariably found the spleen enlarged when the liver was in a contracted condition.

Dr. R. W. Smith had by subsequent observation found this to be the case. The case now shown

forms no exception to these observations, and the attention of future observers is now called to this point. The student, for information relative to cirrhosis of the liver, is referred to the works of the authors already mentioned, and to Dr. Law's observations, contained in the Transactions of the Dublin College of Physicians.

STATISTICAL SOCIETY.

COLONEL SYKES, F.R.S., Vice-President, in the Chair.

The following papers were read:—1. The "Prevalence and alleged Increase of Scrofula, by Benjamin Phillips, Esq.;" 2. The "Mortality of the Madras Army," by Colonel Sykes. The conclusions arrived at by Mr. Phillips as to prevalence of scrofula are based upon the examination of 133,721 children, and a large number of adults; and the results are tested by the examination of 95,586 recruits, by the examination of between 4,000 and 5,000 convicts, by the application for relief of 255,297 persons at hospitals and dispensaries, and by the evidence furnished by the mortality table of the Registrar-general. Such are the means the author has employed to ascertain how far the ideas commonly held with regard to the great prevalence of scrofula in this country are correct, and he concludes, although the facts which he has collected may not represent the exact amount of prevalence of the disease, still they are a nearer approximation to the truth than anything we before possessed on the subject; and they cannot fail to impress upon the mind the conviction that, unless scrofula degenerates into some other disease, its actual prevalence as well as its influence in the destruction of human life in Great Britain is not very formidable. The prevalence of scrofula in Portugal, Holland, Bavaria, Austria, Prussia, Russia, America, India, Syria, Greece, Egypt, Madeira, France, &c., was recorded in Mr. Phillips' paper, and the conclusion come to is thus expressed: Is it not abundantly proved that the notion that scrofula is eminently an English disease is incorrect; and am I not warranted in stating that there is no European country so far, at least, as our information extends, in which the people are more free from the disease than in England and Wales? The question of the alleged increase in the frequency of scrofula is resolved by a careful digest of the bills of mortality—the only plan to which no objection can be made. The following tables show the results:—

Period.	Population.	General Mortality.	Consumption.	Scrofula.
1700	665,200	20,900 = 1 in 31	3589 = 1 in 182	73 = 1 in 9,180
1750	651,000	25,350 = 1 in 26	4530 = 1 in 141	22 = 1 in 29,727
1801	777,000	19,630 = 1 in 40	5028 = 1 in 154	5 = 1 in 155,400
1811	888,000	18,575 = 1 in 48	4511 = 1 in 196	5 = 1 in 177,600
1821	1050,000	19,056 = 1 in 55	4491 = 1 in 233	10 = 1 in 105,000
1831	1243,000	20,210 = 1 in 61	4735 = 1 in 258	9 = 1 in 135,888

SCROFULA.

Period.	Population.	Deaths.
1700 to 1750	660,000	2076 = 41 per annum = 1 in 16,097
1750 to 1800	715,000	579 = 11 per annum = 1 in 65,000
1800 to 1830	1,000,000	248 = 8 per annum = 1 in 125,000

Tried by these tests, Mr. Phillips concludes, that scrofula is much less prevalent in the present day than it was in the seventeenth and eighteenth centuries.

Colonel Sykes expressed his opinion that an exaggerated view is generally taken of the diminished value of life in India, and of the loss occasioned by spasmodic cholera, and he presented to the meeting the following table of per centages of deaths during five years in the Madras army, a body of about 1,580 European officers, 3,762 European soldiers, and 62,514 native soldiers, exclusive of the royal army, distinguishing Europeans from natives, and the per centage deaths from all causes, inclusive of cholera:—

	1840	1841	1842	1843	1844
EUROPEAN TROOPS.					
Deaths from all causes	4333	3130	4205	4905	2810
Deaths exclusive of those from cholera	3843	2969	2855	3218	2397
NATIVE TROOPS.					
Deaths from all causes	1136	1460	2631	2371	1991
Deaths exclusive of those from cholera	965	1126	1600	1144	1284

ETHNOLOGICAL SOCIETY.

At the anniversary meeting on the 29th ult., Rear-Admiral Sir Charles Malcolm, president, in the chair, the following gentlemen were elected into the council:—J. Cowles Prichard, M.D., president; Rear-Admiral Sir Charles Malcolm, Right Hon. Lord Francis Egerton, M.P., vice-presidents; Sir James Clark, M.D., treasurer; Richard King, M.D., secretary; the Archbishop of Dublin, Sir Samuel Rush Meyrick, Rev. Frederick William Hope, William Ogilby, Esq., M.A., William Twining, M.D., Thomas Southwood Smith, M.D., Samuel Duckworth, Esq., Councillors. Sir Charles Malcolm then delivered his anniversary address on the progress of ethnology during the past year.

At the ordinary meeting of the 27th ult., the following papers were read on the Inhabitants of Batticaloa, Ceylon, by Mr. Selby Taylor; on the treatment of the dead by the ancient Peruvians, by Dr. de Ischudi; and on the races of India, by General Briggs. The inhabitants of Ceylon consist of Tamuls and of Vadahs, the remnant of the supposed aboriginal population. The Vadahs are dispersed over a large tract of forest, and are estimated to number about one thousand. The bow and arrow is in use amongst them, with which they kill deer, elk, hogs, and monkeys, for food. Dr. de Ischudi is of opinion that the ancient Peruvians embalmed the bodies of their kings only, and that the remains that have been found of the ancient people are not mummied, but dried by the action of the air; and he mentions in confirmation of his views, the remains of a child presented by him to the Imperial Academy of St. Petersburgh, in which the ribs are open at their junction with the sternum, and through which opening the several organs in their respective places in the thorax are to be seen. An analysis of a substance found in the skull, and at first sight apparently a portion of some preservative powder, shows it to be a substance known to chemists as the result of decomposition of animal matter. Notwithstanding this, we must have further proof, and of a more satisfactory character, in order to conclude that the preservation of these ancient Americans is merely the result of accident. Of General Briggs' paper, we defer our notice until he shall have concluded his subject, which at this meeting he produced in part. We may mention, however, that two of the high caste Hindoos now in this country took an active part in the discussion which followed the reading of General Brigg's paper.

TO CORRESPONDENTS.

Chemicus *writes under an error. Mr. Gardner is a Giessen M.D., but also holds a license (by examination) from the Apothecaries' Society. He is the author of an elaborate and amusing religious work called "The Great Physician."* Chemicus *gives no solid ground for his attack on the College.*

We beg to thank A Governor of the Westminster Hospital *for his favour. We were aware of the proceedings in question, and shall probably notice them on another occasion.*

A Country Surgeon.—*The meetings of the Microscopical Society are held on Wednesdays, at their rooms, 21, Regent-street, at eight o'clock.*

Veritas, Lincoln's-inn, *sends us queries enough to occupy an octavo volume, or a number of the* Medical Times, *in answering. We recommend our correspondent to apply to the nearest qualified medical man, who will, doubtless, favour him with all the information he may require.*

Mr. W. F. Clay *requests us to correct an error in the list of Members of the College of Surgeons, published in a late number, when our correspondent was announced as* Mr. F. T. Clay.

Dr. Moses, of St. Asaph, *sends us the following fact in ornithology:—*

"*A female siskin,* 'fringilla spinus' *of Linnæus, was shot in my garden, at Rhyl, on the second of this month; it was feeding on the aphides of the elm tree, which it seemed to extract with great agility from the curled leaves, and was exceedingly tame. This bird has hitherto been described by all British naturalists as merely an occasional winter visitant. Now, here we have a specimen with us after the usual breeding period of the finches, and adapted to a new mode of diet, their usual food being the seeds of the alder.*"

A Retired Surgeon.—*We believe the operations of the Sanatorium are for the present suspended.*

Mr. Bulley's *case shall be published next week.*

One whose Name is upon the Roll of Subscribers to the *Medical Times.—Our position calls for the exercise of even-handed justice, without respect to persons or places. Will our correspondent say that when abuses exist, they should not be laid bare?*

Mr. George Gibson, of Ulverston, *has forwarded to us a circular, addressed to his professional brethren, urging their active co-operation with the committee of the National Association, in establishing the National Institute.* Mr. Gibson *records the estimation in which he holds the labours of the committee, as follows:—"The committee which was elected to manage their affairs soon displayed an unprecedented degree of energy and talent which convinced the Minister and the public that the interests of so useful a body could neither be disrespected nor sacrificed." Speaking of the broad basis on which the Institute will be formed,* Mr. Gibson *says:—"The National Institute will be based upon the most liberal principles. The council which will be elected to manage our affairs,*

by reflecting our feelings, we shall be satisfied are the real representatives of the profession, and their interests will be so wound up with our own that it will be impossible to act in any way but for the general welfare."

The Pharmaceutical Number *of the* Medical Times *for May, is now ready, and contains twenty-four closely-printed pages of the most important matter to the chemist, pharmaceutist, and general practitioner. Price 5d; Stamped 6d. J. A. Carfrae, Essex-street, Strand.*

THE MEDICAL TIMES.

SATURDAY JUNE 13, 1846.

"There's a divinity that shapes our ends
Rough hew them as we may."—SHAKSPEARE.

THE Council of the National Association have just circulated "The Plan and Objects of the NATIONAL INSTITUTE." We give them at length in another column.

"*The qualifications,*" they lay down for "*membership*" are substantially quite as they should be. During the first six months all legitimate medical practitioners are eligible: afterwards all gentlemen who can satisfy the ruling body of their competency for medical practice. The latter provision studiously leaves the New Institute wholly unfettered as to whether or not it shall be a mere registering office for the certificates of other institutions, or shall establish or enforce examinations of its own.

The "*system of government*" is, as a whole, as unobjectionable as any that can be propounded. It contains all the customary ingredients of representative government, and there are quite enough of checks against any hasty or lawless exercise of the privilege. About the *minor* details, each will have perhaps a somewhat varying opinion, but no practical man will feel tempted to a discussion, for on such matters the importance of even an improvement must be so trifling as to be more than counter-balanced by the evil of the wrangling and discussion necessary to secure it. Thus, on the yet unsettled point of eligibility to Councillorship, we should feel disposed not to fetter the electors unnecessarily in advance. Why preclude, by the condition of a certain number of years' standing, any gentleman as eligible to the Council (though he be young as Bichât or Laennec when either died) should the Profession feel him worthy of the distinction? The majority of the Profession, we are aware, differ with us on this point. They think it necessary to bind themselves by an early pledge against electing under any circumstances any practitioner of short standing. Whichever be right, the advantage must be so inconsiderable in fact, and so much a matter of doubt and speculation in theory, that we could feel little hesitation in foregoing our preference, and bowing to the wish of the more numerous. It is only by such reasonable and honourable compromises that large bodies of men with varying impressions and preferences are brought to pursue one general policy, useful in the main to all.

"*The objects of the Institute*" are given as sevenfold. These are, to speak in general terms, exactly the functions which the *Profession's* Colleges (we must be pardoned the misnomer) *should* discharge, but do not. The National Institute is to be to the Colleges much what the extra-academical teachers of Edinburgh were to the University Professors. The one set are paid for duties which the other set are to perform. The Institute is to watch over the interests of the profession and the health of the public; to maintain a high code of professional conduct and a respectable standard of professional attainment; to obtain a general registration, and to suppress quackery by all wise expedients; to found a medical club; establish a public library; to cause and to encourage, to the utmost, a competition for the advance of science. An especial and peculiar object—the seventh—to be added to all these is, that there may be a body to negotiate with the Ministry for the royal foundation of a College of General Practitioners.

Many of our readers will feel inclined to inquire wherein, by this programme, does the National Institute differ from the National Association? There is a difference, and a considerable one, but it is less in actual appearance than in latent capabilities. The Association and Institute, taking this programme for our guide, had much the same duties and aimed at much the same ends; but the organisation of the Association being of a much ruder texture and more temporary character, depending less also on the deliberate and systematic support of the Profession, it could not safely assume the duties or powers of a College save by some intermediate step like that now adopted, or by the special authorisation of Parliament and the Crown. It was but the thing of an emergency; an agitating force that, if not immediately successful, must subside with the excitation of the crisis, or assume some more deliberative and determinate character. The *Institute* gives us the old power in a new form *made permanent*; and capable of every development the circumstances of the time may call for. We do not blame the Committee for the caution with which they thus launch their new Institute. We do not upbraid them for using language which, without pledging them to anything definitively great, leaves them free to adopt the boldest and the most statesmanlike of courses that circumstances may justify. The great point is, that they take care to be armed for every contingency, and do not shut out one capability that may, in progress of events, be required. They are probably quite in the right to proceed thus step by step, and not to act, as we possibly might, in an over-sanguine confidence of the earnest and continuous support of the profession. The work is, after all, the profession's; if the profession wish and merit the salutary revolution now in their power, they will not fail to secure it; and prematurely, it may be, to publish large or complete schemes of salutary change, would be but to hazard defeat, without any justifying or useful object. Let us not repine, therefore, that we are not in so many words called on to form a College of Medicine, Surgery, and Midwifery, for Great Britain and Ireland. The best policy, it is possible, is, that we should, as now, be invited to establish an Institute so organised that it may become that College the very moment we shall say "let it so become."

With all these allowances, however, we must not scruple to avow our own strong and independent opinion, that the Profession is ready for the movement in its fullest development. There is but one opinion as to the old corporations. They have lost the only charm they had. Their only scientific productions—their diplomas—have become worthless and contemned. They no longer give even a semblance of professional respectability. The aged and self-willed societies have fallen on evil times and into evil hands. They are obsolete—effete—moribund. They form in their cadaverous aspect the vivid contrast to the life and freshness of science that is on the wing abroad. They are centuries behind their time; the Profession has outgrown them; like some wretched and helpless miser of the Roman poets, they are but the prey of a few self-seeking, characterless parasites, and are the scoff and laughter of the intelligent and honourable world around. The Profession, disgusted at the spectacle, are earnest for something better. They aspire to an organisation worthy not only of themselves, but of the empire. We are at the moment when this aspiration is at its zenith, and we are certain the committee of the National Association might appeal to it with certitude of confidence. But delay is not loss—postponement is not extinction. The *rôle* the committee have not volunteered to assume, circumstances will inevitably force on them; and it will not, therefore, be the worse played. *They have carefully arranged for the possibility.* Prudence and a very provident foresight have been pre-eminently the characteristics of the committee up to the present time; they have hitherto been led, step by step, to greater and more successful developments; and up to this time have as much sought to follow as to lead public opinion, and we will not doubt that the Profession, feeling that a portion of the responsibility of the great change they desiderate is thrown on their own shoulders, will be thus stimulated to extra exertion. Medical men fully discharging their share of the obligation, the committee will have no choice but to step forward boldly and to perform theirs. We repeat it—this is the contingency they have so providently arranged for.

One word to those who, with strong feeling on the present state of the Profession, have yet systematically abstained from committing themselves to any public expression of their opinions. We would submit to these gentlemen, now that a very practical and a very important movement is being taken, requiring nothing for the most complete success but a general co-operation, that this would be a most ill-advised and mischievous moment for the continuance of their apparent neutrality. There is no denying that the Profession is in a most unsatisfactory condition; and there is the self-reproach of a dereliction of duty in not making a useful effort at a period so favourable. We have in our own hands the ameliorations we desire. An instrument is offered us, for the first time in the century, which, well and earnestly used by us, may achieve every end we aim at. On the principle that to be free, men have but themselves to strike the blow, we shall deserve the horrid farce of a medical Government under which medicine is crushed in England, if we now in idleness, or apathy, or, worse still—genteel neutrality—submit to it.

HYDROPATHY.

A LAMENTABLE case of death following hydropathic treatment, has just occurred in the house of a person described as Dr. Ellis, of Sudbroke-Park—a water-cure establishment near Petersham.

An accountant, named Dresser, of Islingto

entered Dr. Ellis's house on May 29th, complaining of sciatica. He appears to have been fed "*humbly*" to use the patient's own epithet (the food being principally or solely tapioca), to have had abundance of baths (said to be warm), to have had the usual appliances of wet bandages about his body, and to have taken one dose of castor oil. After four days of this treatment, the patient died. The following are the important points of the evidence:—

Mr. W. D. Dresser (a relative).—"On Tuesday morning last I received intimation that Mr. Dresser was dead, and accompanied Mrs. Dresser, with Mr. G. Arnold, to Dr. Ellis' establishment, where he had died. When I saw deceased's body, it was lying on a bed in room No. 4. There was a great change in his face, and he was nearly black about the neck. He was a dark man when in health, but his face when dead was much more so. The body appeared to be much swollen, and froth was issuing from his nostrils, covering a large portion of his face. We had seen Dr. Ellis previous to examining the corpse, and on asking him the cause of death he placed this paper in my hands, saying, it contained the diagnosis:—

"Mr. Richard Dresser came here on Friday last, to seek relief from what he termed rheumatism in the hip (properly *sciatica*), giving no other particulars. The case was thought admissible, but it soon appeared that he was suffering from hepatitis of the sub-acute character, giving rise to suppuration, occasioning exudations of lymph, and a rapid extension of the disease to the adjoining viscera. The symptoms were tympanitis, total inaction of the bowels, and sluggishness of the urinary organs, very severe pain in the left leg, from the groin along the thigh to the ankle, coldness of the extremities, and loss of power. He was treated as is usual to subdue the symptoms; the pain was soon suspended; the bowels, though stubborn, acted freely after the usual means had been tried, and continued to do so. The appetite allowed of his taking a little farinaceous nourishment, but disease proceeded insidiously; sub-acute inflammation advanced gradually, though there was no sign of active progress; the organ became generally the seat of suppuration, the pulse became quicker and softer, with much perspiration; the countenance became pale and sallow. There was tumefaction of the liver, with a doughy œdematous or boggy feel of the hepatic region generally. The enlargement or bulging was very great about the false ribs; oppression with dyspnœa, or short breathing, immediately preceded his decease, which took place at twenty minutes before eight o'clock this morning, June 2, without either a sigh or struggle. In three or four hours after his decease the fluids filled the chest and throat, and oozed copiously out of the ears, nose, and mouth.

"J. E."

Mrs. Maria Dresser (the widow of deceased).—"I saw my husband at Dr. Ellis's establishment on Sunday afternoon, the 31st of May. I understood he had been placed in a warm bath, and he said his pain had left him. He was sitting up in bed covered with wet wrappers and blankets. I asked what food they gave him, and he replied that they kept him very humble, not what he had been accustomed to. I remarked upon his strange position in bed, and he replied that his legs were useless. I felt his legs, and they were as cold as marble. I took tea in his apartment, and wished him to take some, but he refused, saying it was not allowed. When Dr. Ellis came home in the evening I told him I thought my husband was very bad, as he was so cold. Dr. Ellis then took a large cloth, placed it in a washhand basin containing water, and then put it on my husband's stomach, saying he was afraid of inflammation, which he wished to stop, because he could not allow so valuable a life as Mr. Dresser's to be lost. Deceased was shortly after placed in a bath, and I saw him in half an hour afterwards, when there was so remarkable a change in his appearance, that I thought he had been struck with death. One of the bathmen told me his perspiration had stopped, and that it was in favour of the patient. Dr. Ellis admitted that my husband had altered after the bath, when I spoke to him about my husband, and he asked me if I wished for further advice for him, or to have him removed. I then left my husband, the doctor promising to send me a letter in the morning by eleven o'clock, telling me how he was. By nine o'clock, however, on the following morning, a gentleman called and informed me of my husband's death. I went to Petersham, and after a great deal of persuasion to the contrary, was allowed to see the corpse. I cannot say whether the bandages I saw applied were dipped in warm or cold water. The baths were constituted of three pails of cold water, with a small portion of hot, taken from a small can the bathman held in his hand."

Mr. James Hicks.—"I am a surgeon, and am in partnership with Mr. Waterworth, of the Old Kent-road. I assisted in the post-mortem examination of the body. Externally it presented the appearance of a man who had died from suffocation, the face being bloated and of a livid colour, with bloody froth and serum issuing from the mouth and nose; the whole of the posterior part of the trunk also bore evidence of extreme congestion. In the chest I found the lungs and heart enormously congested, the latter being large and flabby, but otherwise healthy. In the abdomen the bowels were greatly distended with flatus, but otherwise empty; the liver was healthy but congested, and bore no evidence of previous disease. I consider the immediate cause of death to have been extreme congestion of the internal organs—the lungs and heart—which existed to such an extent as to produce all the effects of suffocation in not allowing air to get into the lungs. This congestion was likely to be produced by cold externally, whether by cold air or cold fluids to the body. Cold applications have the effect of repelling the blood from the surface of the body to the internal organs, from which in weak constitutions the system is unable to relieve itself. I have read the paper written by Dr. Ellis as to the cause of death. It does not contain at all the true cause of deceased's death. Quite the contrary. There was not the least appearance of disease in the liver. There had evidently been congestion of the lungs when the wet clothes were applied, and if the water were cold it would produce death. There was no suppuration of any kind."

John Maynard.—"I am bath attendant at Dr. Ellis's establishment, near Petersham. On Saturday morning deceased had a bath at a temperature of 65. He was in the bath for ninety seconds. He was attended by Dr. Ellis during the day, but I saw nothing more done for him that day. I carried water into the room, both hot and cold, during the day, two or three times, but I don't know what was done with it by Dr. Ellis to Mr. Dresser. There was about half a gallon of cold and half a gallon of hot water each night. On Sunday morning I prepared deceased a bath as before, and I also carried in hot and cold water. After Mr. Dresser had the bath on Sunday morning, he went out and walked in the pleasure-ground with me for about five minutes, and afterwards with Dr. Ellis. He then went to breakfast with other patients in the public room. He afterwards lay down with blankets over him, and I carried in water as before. I saw Mrs. Dresser there on the Sunday. On Monday morning he again had a bath, and tapioca and bread and butter as nourishment during the day. I carried no water in on Monday until the evening. A bath might have been given to Mr. Dresser without my knowledge. I made no observation on the Monday evening about the perspiration in which deceased had previously been having stopped. I did not see Mrs. Dresser in the room on Monday night, or make such an observation to her. I saw deceased on Tuesday morning, and I believe that the Doctor sat up with him all Monday night. He had no bath on the Tuesday morning. It was about seven o'clock in the morning, and he was lying on the bed. I did not see him afterwards alive. I am not aware that he had any other food than the tapioca and bread and butter I have spoken of. One of the bathmen was ill on Monday, and the "boots" attended for him. On the Sunday I took some castor-oil to deceased by order of the doctor. The deceased took all the food he desired.

Mr. Charles Waterworth.—I am a surgeon. I have known the deceased, Mr. Dresser, for six or seven years. During that period his general state of health has been good. I attended him for rheumatism four years ago, occasionally in the stomach. I last attended him for jaundice and stomach derangement in March last, which arose from impediment to a natural flow of bile into the bowels. There was not disease of the liver. I had not seen him since the middle of April, until I attended the post-mortem examination of the deceased's body. There was nothing to account for death but the congested state of the lungs and the heart. Deceased was a man of very feeble power as regarded the action of the heart. I don't think there could have been any reason for treating him for diseased liver. The only judgment I can form of what disease deceased was labouring under from that report is difficulty of breathing. I attribute the congestion of the lungs and heart of deceased to the external application of cold. The liver was not congested, although Mr. Hicks thought so; but I can say I hardly ever saw a more healthy liver in my life.

The Coroner proceeded to sum up the case to the jury. He observed that in the case of Mr. St. John Long, which had been previously alluded to, the judges had laid down the law in a very clear and perspicuous manner, as did also the present Lord Chief Justice, who was then Attorney-General, and conducted the prosecution. That learned authority argued, as in the case of St. John Long, that, although there might be no malice aforethought, if he proved the defendant had applied himself to the treatment of a case of which he knew nothing as to its proper treatment, and that he administered a liquid or medicine of the constitution of which he had no knowledge, he was clearly guilty of manslaughter. The judges in the same case laid it down that, whether a man was a legally qualified practitioner or not, went for nothing. The question was, whether the treatment adopted was a rash and reckless treatment, and which had resulted in the death of the patient, or whether it was such treatment as might, under any other circumstances, have ended in fatal results. Now, in the present instance, they had no evidence that Dr. Ellis was not a duly qualified practitioner, and, therefore, the sole question for the jury to consider was whether, in the present case, he had acted towards the patient in a *bonâ fide* manner, or had acted in his treatment with a gross degree of recklessness or rashness and inanition, and thus caused death to ensue. If the jury viewed the case as one of *bonâ fide* treatment, then they were bound to acquit Dr. Ellis of all blame; but if, on the contrary, they considered he had acted with rashness, then their verdict would be one of manslaughter.

The jury unanimously agreed, "That Mr. Dresser's death resulted from the rash treatment he received under Dr. Ellis's care. We are unanimous in a verdict of manslaughter against Dr. Ellis."

It would be highly unbecoming in us, under present circumstances, to enter on a commentary which might prejudice the person who has to answer the serious charge deliberately preferred against him by a jury of his fellow-subjects. We postpone, therefore, any remarks we may feel called for by this singular case, and now confine ourselves to a strong protest against the conduct, at the inquest, of Mr. Prendergast, the counsel for the accused. According to the report before us, this learned gentleman was not content with pushing his cross-examination of Mr. Waterworth to a very uncourteous extent, but, after addressing one of his questions to the witness, exclaimed in full court, "Come, *Mr. Medical Man*, do you mean to answer that?" Mr. Prendergast has the reputation of being one of the most acute and learned members of the bar, and that he could be betrayed in full court into an uncourtesy so offensive, does certainly as much surprise as grieve us. We fear the cir-

cumstance, occurring in a quarter so respectable, is symptomatic that the unfortunate mismanagement of our body has not failed to produce on the bar that disparaging view of the medical character it was *intended* to produce generally on the country. When the heads of Colleges connect the words "felons," "indecent advertisers," and similar terms of reproach with surgeons from whom they have previously stripped a purchased position of respectability—when medical journalists address them as "Gallipot-lodge gentry," as "snipes," and "sneaks," and so forth—how can we be amazed that counsellors, however respectable, take the license of treating medical men in the same discourteous fashion, and parodying the expression, "Well, Mr. Merryman, what next?"—exclaim, "Come, Mr. Medical Man, do you mean to answer that?" Mr. Prendergast received a disapproval from the Coroner (Mr. Payne), which he well deserved, and it is some consolation, amid the indignities heaped on the Profession by its own members, that the rebuke of the magistrate was warmly cheered and re-echoed by the crowded auditory present.—[Since writing the above, we have learnt that Mr. P.'s meaning was misunderstood.—Ed.]

PLAN AND OBJECTS OF THE NATIONAL INSTITUTE.

I. PLAN OF THE NATIONAL INSTITUTE.

1. Gentlemen eligible to become Members.—In the first instance, those who were in actual practice previous to the 1st of August, 1815; licentiates of the Society of Apothecaries; members of the Royal College of Surgeons in England, Ireland, or Scotland; doctors or bachelors in medicine of any university of the United Kingdom, and fellows or licentiates of any College of Physicians of the United Kingdom, who shall have been in actual practice as general practitioners in medicine, surgery, and midwifery; or who shall satisfy the council of their qualifications to practise in medicine, surgery, and midwifery. All persons possessing either of the foregoing qualifications, and who are at present members of the National Association, or who shall enrol themselves previously to the expiration of six months from the date of the formation of the Institute. Subsequently, such persons only as shall satisfy the council as to their qualification to practise in medicine, surgery, and midwifery.

2. Principles of Government.—One president, to be elected by the council triennially, and eligible for re-election; three vice-presidents, to be elected by the council from their own body by ballot, one to go out every year, and not to be eligible for re-election for a year; a council, to be composed of forty-eight members, one-half practitioners, resident within ten miles of the General Post-office, the other half, country practitioners resident beyond that distance. No member of the Institute to be eligible as a member of Council under —— years from the date of his qualification to practise. *The council* to be elected by the members of the Institute; every enrolled member to be entitled to a vote. One-third of each metropolitan and provincial branch of the council to go out of office annually, and the vacancies to be filled up in equal proportions from the respective branches, but the retiring members not to be eligible for re-election for a year. The election to be by voting papers, and decided by a majority of votes. The council to prepare a code of laws for the regulation of the affairs of the Institute, subject to the approval of a general meeting of the members.

II. OBJECTS OF THE NATIONAL INSTITUTE.

I. To form a complete organisation of the general practitioners of medicine, surgery, and midwifery, in a representative institution, on a permanent basis, with an authoritative council, for the purpose of watching the course of medical affairs,—of advising the members of the nature and bearings of any legislative changes that may be proposed,—of taking such steps thereon as the profession may demand—and generally of protecting the interests of the qualified practitioners and of the public in all matters that relate to medical legislation.

II. To adopt a comprehensive and well considered code of bye-laws, for the government of the institution, calculated to produce harmony of sentiment and unity of action among the members, and to discourage as far as practicable, discreditable acts in connection with the practice of medicine, thereby promoting the true respectability of the great body of the profession.

III. To promote a high standard of education and qualification, with a satisfactory test by efficient examinations, for every individual authorised, by law, to practise medicine, surgery, and midwifery. In furtherance of this object, to encourage the Apothecaries' Society to prosecute their duties with increased zeal, and to continue to elevate the character of their examinations: also to watch, from time to time, the standard of qualification for the membership of the College of Surgeons, and, if found to be insufficient, to adopt such measures as may be best calculated to promote the efficiency of the member to practise surgery as a general practitioner.

IV. To use every practicable and legitimate means to expose, discourage, and suppress illegal and unqualified practice. In the absence of any legal registration, to publish, or to further the publication, on authority, of a complete register of the qualified practitioners in actual practice; thereby giving facilities to the Society of Apothecaries for prosecuting those who may render themselves amenable to the law.

V. To carry out, as far as the funds placed at its disposal may permit, those professional and social objects which have been found so advantageous to other collective bodies of educated men, among which may be enumerated the formation of a library, the collection of a museum, the occasional publication of transactions, the opening of reading and lecture rooms and of a common hall, and the establishment of prize essays and public examinations on specific subjects. By such means to enlist the zeal and ability of the great body of the profession in the cause of medical and general science, to perpetuate their labours and experience, and to facilitate direct and friendly communication between the central council, the local secretaries, and the members of branch associations.

VI. To employ all legitimate means for the purpose of urging upon the Government and the legislature the claims of the general practitioners of this country to corporate rights; and to an Act of Parliament securing to the public a high standard of qualification and competency for every individual allowed by law to practise medicine, with protection against unqualified pretenders; and to the profession at large those rights and privileges for which they have so long contended.

VII. To constitute a body competent to negotiate with the Government in the event of the Right Hon. the Secretary of State for the Home Department redeeming his original pledge to grant the general practitioners a Charter of Incorporation.

By order of the Committee,
George Ross, Secretary.

SKETCH OF PROFESSOR ROSÉ, OF BERLIN.

By Dr. Sheridan Muspratt.

Giving descriptions of remarkable men has become quite a furor, and I would that it had always been so, for then many bright luminaries in science and literature, that have partially perished, might afford delightful hours of comment at the present day. I have noticed a series of articles in the *Medical Times* upon distinguished savans, which have met with decided approbation in England and Germany, because they contributed to enlighten mankind upon the minds and manners of men who have long since paid the debt of nature.

I am sure it will not be uninteresting to the generality of your readers to learn something of one who occupies the second place in Germany as a chemist, and the first place in the world as an analyst—Professor Rosé. It has been a source of deep regret to me that he is so little known in England—this is principally owing to his simplicity, for had he possessed a little more tact and worldliness there is no doubt his name would have been as *notorious* as that of some of our clap-trap philosophers. "Worldly prudence and much ability are quite compatible with each other, but seldom found together." The greatest man in any department is very seldom appreciated during his life-time, and we have a beautiful illustration of this in the case of the immortal Shakspere.

> "Who walked in every path of human life,
> Felt every passion; and to all mankind
> Doth now, will ever, that experience yield,
> Which his own genius only could acquire."

How many people in England, for instance, know the name of Berzelius, who is justly acknowledged to be "the greatest chemist of our own and of all times?" Perhaps ten thousand. In Germany and France, however, the case is very different. Men of science look for the highest honours in the land, and instead of being recognised *as apothecaries*, sit on equal terms at the table of their prince. Science on the continent is reverenced; in England it is looked upon as a species of legerdemain.

My first interview with Professor Rosé was in his library, well-filled with choice works, and ornamented with excellent portraits of the leading men of Europe. After having read the letters of introduction which I brought to him from Baron Liebig and Dr. Petzholdt, he said that such were not necessary for any person who had published either in the English or German annals. This I found afterwards to be the case.

The next day I was one amongst about three hundred students assembled for the morning's lecture. As the hour of ten was striking, a door opened, and in walked the distinguished man, with his hands behind his back and his side turned to the audience. He entered speaking, and paced to and fro during the whole time. His only interruptions being while performing experiments, or placing various formulæ upon the black board. This mode of lecturing appeared somewhat strange to me at first; in a short time, however, the subject became exceedingly interesting, and the Professor's beautiful illustrations made me forget the *manner* in the *matter*. The lecture was upon the salts of mercury, and although these compounds are expensive, still the lecturer never passed over an experiment that might prove of service to his class: how different is the case with some of our professors!

As soon as the clock struck eleven Professor Rosé marched out through the same door, although in the middle of a sentence, and this I learned was his usual practice. He takes six pupils in his private laboratory gratuitously, and with these he works the whole day, now and then interrupting their labours with curious anecdotes of chemists. The following morning I received a polite invitation from him to attend one of his *soirées*, to meet several of the Berlin philosophers. I can never forget that evening, for it would almost be impossible in any other part of the world to meet so many celebrated men. Ehrenberg, Magnus, Dové, Poggendorff, Schomberg, Rummelsberg, and a host of others that would adorn any age or country, being present. Magnus and Dové are very amusing in private. They spoke in the highest terms of Rosé, and said that he was beloved by all who had the honour of his acquaintance. On the Saturday I called reluctantly to say farewell to Dr. Rosé. He was in his laboratory, busily engaged with some analysis, but as soon as he saw me he shook me cordially by the hand, and wished me to stay longer in Berlin. I was very sorry that I could not accept his invitation. He showed me round his laboratory, and brought out from one of his cupboards an immense silver basin, which he told me had been made from his precipitates. He always collects his silver and platinum precipitates, and when he has a sufficient quantity of each, he reduces the compounds, and has the metallic products manufactured into different utensils for laboratory purposes. His silver basin is quite a curiosity, and will probably at some future period adorn a museum. Rosé informed me that Berzelius had a platinum one of enormous dimensions, which was derived from a similar source.

Many of your readers would probably like to hear about some of the literary productions of this rare professor. His great work is the "Handbuch des

Analytischen Chemie," the first part of which was translated by Mr. Griffin, in the year 1830. This is certainly the greatest work ever published upon the subject, and although many treatises have since appeared, still they are mere abridgments of Bosé. The facts contained in these volumes have cost the author many years to establish, and about every three years he brings out new editions revised and enlarged, so as to keep pace with the glorious science upon which they treat. Rosé has also published investigations upon the salts of nearly every metal, and upon the various compounds of ammonia. His memoirs upon the carbonates of ammonia and sulphimide are exceedingly interesting, as well as those upon the compounds of chloride of mercury and ammonia. His renown, however, principally rests in having given to the world the first true system of analysis.

This mere summary of Professor Rosé's scientific researches is sufficient to prove the power of their author.

In stature Professor Rosé is about five feet eleven inches, with a robust mould. His head is large, and the forehead of marvellous capacity; the eye beams with humour, and the whole face is exceedingly animated and agreeable. A portrait of him has not yet appeared in England, but the one circulated in Berlin gives an excellent idea of the man.

I hope that many, after reading these hasty remarks, will pay their respects to this son of Berlin, and, if they do, they will find a man possessing an amiable and cheerful temper, conversational powers of the most delightful kind, great intellectuality, with much goodness of heart, and, indeed, every requisite for securing private esteem and the approbation and applause of mankind.

CASE OF PHTHISIS, WITH PLEURO-PULMONARY FISTULA.

By A. Browne, M.D.,
Surgeon to the 37th Regiment.

Private John Rowe, aged twenty-six, of sanguine temperament, strong, and muscular, was admitted into the hospital of the 37th regiment on the 3rd of August, 1845, with symptoms of pulmonary consumption, which underwent little change until the 3rd of September, when he suddenly complained of acute pain in the left side of the chest, with great dyspnœa, and on the 11th he began to expectorate purulent matter, at intervals, in large quantities. When he came under my care, early in October, the left side of the chest was larger than the right, the intercostal spaces were level with the ribs, and the motions of the latter were very limited. The sound on percussion was extremely clear over the whole anterior surface of the chest, on the left side, even in the precordial region, and in the horizontal posture became dull, laterally, along a line about four inches outside the nipple; but the dulness of the lower part of the chest varied with the position, and in the back it was permanently dull only between the base of the scapula and the spine. Respiration was totally inaudible on this side, with the exception of a small spot at the sternal end of the second rib, and the sounds of metallic tinkling and fluctuation on succussion left no doubt of the presence of air and fluid in the cavity of the pleura. The sounds of the heart were faintly audible in the precordial region, but quite distinct, and accompanied by a trifling impulse under the cartilages of the ribs on the right of the sternum. Percussion elicited a comparatively dull sound over the anterior and lateral surfaces of the right side, but here the respiration was almost puerile, with cavernous râle below the middle of the clavicle, and there was also distinct pectoriloquy at the same point. The liver was large, and descended to within two inches of the umbilicus. He usually lay on the back, inclining to the left, or altogether on the left side, and complained of an intolerable feeling of suffocation when he turned on the right. The pulse was small and frequent (seldom under 100); the dyspnœa was constant, though at times considerably increased; the cough was troublesome, chiefly in the morning, and he often expectorated a pint or more of purulent matter in a very short time, when the flow would suddenly cease, to return after a longer or shorter interval, particularly after sleep. He continued in this state for several weeks; the disease making little progress in the right lung, but the emaciation and debility slowly increased; small bed-sores formed on the sacrum and left trochanter, and at length diarrhœa supervened, which carried him off on the 25th of January, 1846.

On examination, thirty hours after death, there was nothing remarkable externally beyond a considerable degree of emaciation, and an evident enlargement of the left side of the chest. The head was not opened. The apex of the right lung adhered firmly to the parietes, and two small cavities were found at this point, and numerous crude tubercles were disseminated through its substance, even to the lower margin. On opening the left pleura, the air escaped with a hissing sound, and this side plainly collapsed. The left lung was compressed to a very small bulk against the ends of the ribs and the spine, and bound down by a thick layer of lymph, which covered the whole surface of the pleura, and contained a quart of purulent fluid, which did not fill one-fourth of its cavity. On the anterior surface of the upper lobe of this lung there were two small apertures which led into an irregular cavity, the size of an almond, and the latter opened into one of the branches of the upper bronchial division. This lung was solid, void of air, and contained numerous crude tubercles of various sizes. The heart was thrust entirely to the right of the median line, and its left side presented a flat perpendicular surface, of which the septum formed the anterior margin; the left ventricle being pushed completely behind the right, so as to give the organ a triangular wedge-like shape, which it retained when removed. The posterior half of the mitral valve was corrugated in the middle, apparently from the effects of the pressure; but in other respects the heart seemed healthy, the only evident changes being in its situation and shape. The lesions of the intestinal canal were such as are common in phthisis. The liver weighed five pounds ten ounces, and the upper surface of the left lobe was flattened and pushed obliquely downwards and to the right. The other viscera appeared to be nearly normal.

This case illustrates, in a remarkable manner, a symptom which, in all cases, when it occurs, appears to me almost pathognomonic of pleuro-pulmonary fistula—namely, the expectoration of purulent matter at intervals, in large quantities, in an incredibly short space of time. This phenomenon is probably the result of the accumulation of the purulent secretion which goes on during sleep, raising the level of the fluid above that of the fistulous opening in the lung, and, when the patient awakes, his exertions to clear away by coughing any mucus or other matters collected in the air passages, give rise to strong inspiratory efforts, that of necessity introduce an extra quantity of air into the cavity of the pleura, which, as it rises through the fluid, cannot escape again by the same route, and is consequently condensed, until its elastic pressure forces the purulent matter through the fistulous tract into the air tubes, whence it is brought up literally in mouthsful, like the blood in hemoptysis, until it sinks below the level of the orifice, when the discharge suddenly ceases.

The rapid and remarkable condensation of a non-adherent lung, which occasionally destroys life in a few hours after perforation, is to be explained on the same principle—the thin edges of the orifice acting as a valve in this case to prevent the return of the air through the aperture, and violent inspiratory efforts may in this way only hasten dissolution.

Some cases came under my notice, several years ago, that appeared to admit of no better explanation than the foregoing, which I offered at the time with some hesitation, and even now consider simply probable. The persistent change of shape of the heart was to me altogether new, and that the pressure of condensed air was the efficient agent in its production seems so evident that it would be a waste of words to advance farther proof than simply to state that the sac of the left pleura, at all times, contained more air than fluid, from the hour I took charge of the patient in October to the day of his death—a period of nearly four months. The escape of air with hissing noise on opening the thorax, whether after sudden collapse of the lung, or chronic pleuro-pulmonary fistula, is also a proof of its compression.

A Fellow of the King and Queen's College of Physicians, in Ireland, who saw the case during life, and was present at the autopsy, can bear witness to the accuracy of the facts above stated.

Newport, Monmouth, May, 1846.

THE SEWAGE COMPANY.

(From a Correspondent.)

We have not been listless or uninterested spectators of the recent debates in Parliament on the Bill of the Metropolitan Sewage Manure Company, to which, some months since, we had occasion to refer. It cannot but be regarded as the private bill, *par excellence*, of the session; as not one whit less important than the first railroad bill; as the antidote to that bane of timid landowners and farmers, the free trade measure of Sir Robert Peel. We do not think that English agriculture has anything to fear from the sluggish competition of the Russian boor, or the more energetic exertions of the busy Americans. But what more certain than that the true condition of the despairing agriculturists is to be found in the speedy adoption of Sewage Manure Bills? It stands to reason that manure—town manure—conveyed by machinery through pipes, and applied by hose, must effect a great economy, and it is equally certain that in the employment of these means England possesses a great advantage over all other countries. Take for instance the United States of America: it is obvious at a glance under what disadvantage they must be placed should this mode of manuring come into general use. The nation whose population in proportion to its numbers is scattered over the largest space, must be put to the greatest expense for the necessary machinery. For every inch of pipe laid down in so densely peopled a country as England, America with her scattered population must require at least a foot. Here is a comfort for the English farmer which no so-called protection can possibly afford him. Give him the benefit of cheap manure, conveyed by cheap machinery, and the agriculturist of England will compete as successfully with the rest of the world as the manufacturer of our staples does now.

But we must view this proposed application of the manure of towns to agricultural purposes a little more closely. The debates in Parliament, though evincing, on the part of our legislators, no little ignorance of the simplest truths of practical science, and in the fashionable inhabitants of Belgrave-square, and its vicinity, unworthy prejudices, and unfounded fears, have elicited from all parties the strongest testimony to the value of the measure, provided it be proved that it will not be injurious to health, or creative of nuisances. This is a very important proviso, and we cordially agree in the propriety of submitting the measure to a select committee, when all its merits and benefits will be fairly canvassed. We trust that the members of this committee will require at the hands of the promoters of the measure distinct proof of its freedom from all the valid objections which have been, or may be, urged against it, and, on the other hand, that the company will use the short interval at their disposal, in making experiments, conducting analyses, and collecting such a body of evidence as shall justify their sanguine expectations and confident assertions.

They must bear in mind that they have two distinct facts to establish—the value of the liquid manure which they propose to supply, and the possibility of conveying and distributing it without creating a nuisance. The company professes to accomplish two objects, the improvement of agriculture, and the relief of the Thames. Can they compass both of them? They must not forget that they will be required to establish the merits of their own plans, as compared with those of an opposite system. It will be a struggle for mastery between the advocates of liquid and solid manure. The fluid company will establish the best claim to support, as supplying the best manure, the advocates

of the solid method as contributing more directly to the purity of the Thames. Neither the legislature nor the public ought to be satisfied with any plan which does not combine both these desiderata, with the avoidance of minor nuisances. If the advocates of liquid manure are prepared with a method of separating the solid matters and removing them from their works without creating a nuisance, they must triumph over the more clumsy method of their rivals, for a system of depositing the solid matters in large reservoirs must be a huge nuisance in the locality which may be visited with the necessary machinery. We shall watch the proceedings before the select committee of the House of Commons with the interest which must needs attach to a measure that professes to minister to abundance on the one hand, and to health, cleanliness, and decency on the other. In a measure of this national importance, we trust that the house will not make too stringent an application of their rules and standing orders, but that they will permit the company to make such alterations in their plans as may meet the strong objections urged by the public, and may fit this undertaking to become the model for all future sewage companies. Should they succeed, what a vision of steam engines at the mouths of all our sewers, and pipes in all our roads, and plenty in all our quarters, will burst upon the prophetic eye, which sees afar off the triumph of mind and machinery over matter. All have heard of the iron net-work which is hidden under the pavements of our streets. Shall not the same net-work extend through every road in the country, conveying the richest manure, in the best form, at the cheapest rate, and guarding at the same time against that from which even England is not altogether free – the dreadful infliction of drought. We wish the scheme all success; but we warn the promoters that they must deserve it.

MISCELLANEOUS CORRESPONDENCE.

QUALIFICATIONS REQUIRED FOR THE DIPLOMA OF THE ROYAL COLLEGE OF SURGEONS.

[To the Editor of the Medical Times.]

SIR,—Allow me to inquire through the medium of your able periodical the manner in which a person whose name I have noticed in a late list of members of the Royal College of Surgeons became possessed of his diploma. The fact is unquestionable, as he has not failed extensively to exhibit it in ****** and its vicinity. The regulations of the College state that to become a member every candidate must be four years engaged in a professional course, with three years at a hospital, and an attendance of three winter sessions on anatomy and physiology. Now, it is well known at ****** that this same individual has been carrying on the business of a *pastry-cook and confectioner* for a long series of years, and that latterly, whilst engaged in the selling of "*sugar-plums*," he became so enamoured of those dispensed by the homœopathists as to commence the homœopathic practice itself. This succeeded so well amongst the credulous, nervous, and timid, as to induce him to procure the diploma of the Royal College of Surgeons, the granting of which by the council of that body I should wish you, in your character of editor of an extensively circulated journal, to inquire into. For the present curriculum of professional education is quite useless, if "retail shopkeepers" can obtain the same privileges in less than a twelvemonth. I beg to add that Mr. ****, the person in question, has now given up the pastry-cook business, and has taken another house in ******, where he intends practising on homœopathic principles.

I am, Sir,
YOUR CONSTANT READER
AND WELL-WISHER.

May 18, 1846.

[We have a perfect reliance on the good faith of this letter, which has been privately authenticated to us, and which we publish as we received it, suppressing the names of the person and place only. We can scarcely believe that the College examiners have knowingly admitted a person to their membership without the requisite certificates. If, however, the person have obtained their diploma by means of a false schedule, it behoves the College authorities to exact a vigorous retribution. But the fact is, we fancy, that the council want to verify their own disparaging definition of membership, and will pass anybody that has the one qualification needful,—*money*.]—ED.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—The following gentlemen were admitted Licentiates on the 4th of June, 1846:—Frederick Robert Knight, John Henry Eddowes, John Elliott Wood, Thomas Joshua Heatson, Peter Royle, Robert Roper, Francis Leopold Hooper, Thomas Benjamin Washington Buckler, John Lawrence Johnston.

ROYAL COLLEGE OF SURGEONS.—The following Gentlemen were admitted Members of this College on the 5th inst., viz:—Messrs. F. J. Rowen, S. Devenish, F. G. Harcourt, T. G. Alanson, A. H. Bayly, H. Bate, C. W. Izod, W. J. Burke, J. Hey, M. J. Burke, W. Ferguson, and R. W. Purnell. At the same Court of Examiners, Mr. Henry Batwell, a member passed for Naval Surgeon.

Mr. Edward Charles Hulme, of Southampton-row, Russell-square, late of St. Bartholomew's Hospital, has been appointed student in human and comparative anatomy at the College of Surgeons.

ALDERSGATE-STREET SCHOOL OF MEDICINE.—Mr. Simon Rood Pittard, the senior student of the Royal College of Surgeons, has been appointed lecturer on comparative anatomy at this institution.

WAR-OFFICE June 9.—11th Foot: Surgeon Arthur West, M.D., from the 99th Foot, to be surgeon, vice Hadley, who exchanges. 11th Foot: William Lloyd, gent., to be assistant-surgeon, vice Telfer, promoted on the Staff. 99th Foot: Surgeon Henry Hadley, M.D., from the 11th Foot, to be surgeon, vice West, who exchanges. Hospital Staff. Assistant-surgeon John Thomson Telfer, from the 14th Foot, to be Staff surgeon of the Second Class, vice Robertson, appointed to the 6th Foot.

M. Leudet, professor of midwifery and the diseases of women and children at the Preparatory School of Medicine and Pharmacy at Rouen, has been appointed the professor of surgery in the place of the late M. Flaubert, and is succeeded by M. Couremaré, as professor of midwifery. M. Des Alleurs has been appointed professor of medicine, and M. Flaubert, assistant-professor. The latter is also directed to assist the professor of surgery in the delivery of his course.

We have the pleasure of announcing that Mr. Evan Thomas, late house-surgeon to King's College, has been appointed house-surgeon to the Cumberland Infirmary.

Petitions, to each of which were attached 125 signatures, have lately been sent to the Houses of Lords and Commons by the physicians and surgeons of the county and city of Cork. The object of the petitions was to obtain reasonable remunerative services rendered by medical men to the Crown and public, under a variety of circumstances. Similar petitions were forwarded some weeks ago to both Houses by the Medical Society of Cork.

At the request of Professor Rech, senior physician to the Hospital for the Insane at Montpellier, a concours will take place on the 1st July, for the office of *interne* to that establishment. The appointment is for three years.

There has been a recent report at Constantinople that the cholera has broken out in the Russian army of the Caucasus.

M. Reynaud has been appointed chief surgeon to the French Marine in place of M. Payen deceased.

The Chamber of Deputies has refused to allot the funds required for the establishment of new chairs in the Parisian Faculty of Medicine, and for the improvement of the secondary schools. The subject will be reconsidered on the presentment of the act for organising the medical profession in France, which has been postponed until the next session.

The Minister of Public Instruction of the French government has taken into consideration the propriety of sending physicians to India to study the progress of the cholera.

At a recent meeting of the Governors of the City of Limerick Infirmary, Dr. Gore, Fellow of the Royal College of Surgeons in Ireland, was unanimously elected one of the surgeons to that institution.

A FEMALE DENTIST.—The following question has recently been decided by the Correctional Court of Brussels:—Madame H. had obtained from the Medical Commission of the Hainault, a diploma to exercise the art of a dentist. She established herself at Brussels, and presented the diploma for registration, as required by law, to the Medical Commission of the Brabant, which, however, refused to perform this necessary formality. Madame H. continued, notwithstanding, to practise her profession. She was therefore prosecuted, the public accuser maintaining that she was liable to punishment for illegally exercising the art of healing. The court ruled otherwise, and consequently judgment was given that the Medical Commission of the Brabant could not refuse her registration, and that as she had complied with the forms required by law no punishment could attach to her. She was accordingly acquitted.—*Gaz. Med. Belge.*

The *Constitutionnel*, Parisian journal, proposes to devote a portion of its columns to the consideration of medical affairs in France.

The following anecdote is related in some of the French journals:—A young woman, residing at Madrid, after suckling her child for some time, without apparent cause began to lose flesh rapidly, to such an extent that she had thoughts of giving up nursing, when, one night her husband approaching her bed with a light while she was asleep, was astonished to find a large snake attached to her nipple, and enjoying the milk with apparent gusto. The reptile, alarmed at the approach of the husband, escaped.

The Baron Humboldt has received the honour of a doctor's degree in Philosophy from the University of Erlangen. This distinguished ornament of science possesses nineteen doctor's chapeaux, conferred by the different societies of which he is member.

Professor Giacomini, of Padua, has been elected a corresponding member of the Royal Academy of Medicine of Paris.

The epidemic of diseases from contraction which had arisen in Belgium has entirely disappeared.

MORTALITY TABLE,

For the week ending June 6, 1846.

Causes of Death	Total.	Average of 5 summers	Average of 5 years
ALL CAUSES . . .	832	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	121	162	188
SPORADIC DISEASES—			
Dropsy; Cancer, and other Diseases of uncertain or variable Seat . . .	86	98	101
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	154	155	157
Diseases of the Lungs, and of the other Organs of Respiration	284	271	234
Diseases of the Heart and Blood-vessels . . .	25	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	70	65	72
Diseases of the Kidneys, &c.	12	7	7
Childbirth, Diseases of the Uterus, &c.	11	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	11	6	7
Diseases of the Skin, Cellular Tissues, &c.	2	1	2
Old Age	33	60	67
Violence, Privation, Cold, and Intemperance .	17	25	26

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of 8th June, 1846; M. MATHIEU in the Chair.

CHEMISTRY.—A memoir, by Professor Louyet, from Brussels, contained the description of a new process, by which the oxygen of silicic and boric acids may be extracted, thus furnishing a certain method of analysing accurately the composition of these substances, which had been hitherto demonstrated only by synthetical operations. Professor Louyet employs the fluoride of silver, which should be heated together with white sand or pulverised boric acid. The latter should be mixed with an excess of fluoric spath, and should surround the fluoride of silver with a sufficient degree of accuracy to prevent it from coming into contact with the parietes of the glass tube. The gases are collected, as usual, under mercury.

SUBNITRATE OF COPPER.—M. Gerhardt forwarded a new analysis of this salt, and stated that Mr. Graham's researches on the subject were far from having yielded him correct results. According to Mr. Graham, the composition of the subnitrate of copper is the following: Oxide of copper 65·6, and water 4·9. According to M. Gerhardt, it would be: Oxide of copper 66·2, and water 12. If M. Gerhardt's conclusions are to be considered as definitively correct, the theory of sub-salts, proposed by Mr. Graham, resting chiefly on the analysis of the subnitrate of copper, has received a severe blow.

SURGERY.—The stereoscope is a new instrument invented by M. Cornay, for the purpose of applying auscultation to the detection of vesical calculi, and even of foreign bodies situated in the soft parts of the body. The instrument resembles a common catheter, and presents at its free extremity a sort of broad pavillion somewhat resembling that of a speaking trumpet.

ACADEMY OF MEDICINE.

Meeting of June 9th, 1846; Dr. ROCHE in the Chair.

THE PLAGUE AND QUARANTINE QUESTION. (Adjourned Debate.)

M. Prus, the reporter, rose to defend the conclusions of the commission against the general objections started by the foregoing orators. He said that the debate seemed to bear only upon four points: 1. Had the commission properly understood the task imposed on it by the Academy, and fairly brought forward the knotty points of the subject? 2. Had the commission taken effective measures to collect evidence? 3. Were the scientific conclusions logical deductions from demonstrated facts? And 4. Were the practical measures proposed in harmony with the scientific conclusions of the report? With regard to the first point, M. Prus thought himself justified in asserting that not a single medical conclusion had been voted by the commission, which did not specially bear upon the quarantine question. The Academy should not be alarmed at the number of these conclusions, the majority not involving principles, but being merely corollaries of established facts. As to the second point, M. Prus had heard no objections against the facts argued in the report. On the third, he might say that no forced interpretation had been given to any of them, although he felt satisfied that the debate must chiefly bear upon the scientific value of these facts. Lastly, the practical conclusions would, doubtless, be considered by the Academy as fair and logical inferences, particularly if the subject were treated with the reserve it called for, and if the serious consequences of a rash decision were taken into sufficient consideration. After premising these general observations, the learned reporter proceeded to answer the numerous objections urged against the report by M. Dubois. M. Dubois had been betrayed by his memory when he stated that he moved in the commission that its labours should be confined merely to the study of the transmissibility of the plague out of epidemic centres. This would be clearly shown by reference to the minutes of the meetings. Besides, M. Prus was of opinion that the duty of the commission was not merely to examine a single question, but to investigate carefully all those which had any bearings upon the practical points of the subject. According to M. Dubois, two of the three great divisions of the report might have been altogether left out without injuring its lucidity; but M. Prus thought every one would acknowledge that the various modes of propagation of the disorder could not be appreciated with any degree of accuracy, unless spontaneous and epidemic plague had been attentively considered under all their aspects. If the influence of local causes were overlooked—if the influence of epidemic constitutions in healthy and in insalubrious countries were not understood—the propagation of the malady would undoubtedly be referred to contact, to miasmata, to latent germs, although these pathogenic agents might possibly have had no share in the propagation of the pestilence. M. Prus considered it almost needless to add, that if three great causes, viz., local conditions, pestilential atmospheric constitutions, and emanations from the patients, concurred in the production of the plague, the study of one only could not lead to any useful results. M. Dubois had further stated, that the two parts of the report which might have been omitted, had not given rise to any practical deductions. M. Prus would ask if it was not a practical deduction from the first part to point out the lands in which the plague arises spontaneously, and whence it may be imported into France? Was it not a practical conclusion to ascertain the producing cause of spontaneous plague, and to lay stress upon the means by which the arts of civilisation had protected ancient Egypt from the scourge? Was it not a practical conclusion to show that the revival of these arts might still prevent the progress of the disease in Egypt, and its development in other countries? The study of spontaneous plague led to the means of effecting its complete destruction; was not this the most radical blow aimed at the very existence of lazarettoes and quarantines? The report further shewed that the knowledge of the epidemic nature of the plague gives the physician the power of preventing sometimes, and always of diminishing the extent of the public calamity. The commission had demonstrated the fallacy of the opinion entertained by most European residents in the east, that by shutting themselves up in strict quarantine, and avoiding contact with *compromised* persons they will escape infection.[1] Were not these great and useful conclusions, and did they not occupy a prominent place amongst the practical suggestions which close the report? M. Dubois had proclaimed the characters assigned to epidemic disorders by the commission to be totally insignificant; and yet these characters had been borrowed from the works of Hippocrates, Sydenham, Stoll, Huxham, Pringle, Schnurrer, &c., all of which were, no doubt, competent authorities. M. Prus fancied he could trace M. Dubois' disdain for ancient authors, to the fact that, in his own work on General Pathology, M. Dubois had started a new theory. M. Dubois admitted willingly that an epidemic is a malady which attacks a large number of individuals at the same season, and in the same place, but refused to recognise the three periods of invasion, status, and decline, as characteristics of the nature of the malady. Indeed, M. Dubois went so far as to accuse the report of bringing forward a truism (*une naiveté*). At any rate, it was an useful truism, by which the physician was taught not to deny the existence of the plague at the outbreak of an epidemic, although the patients presented neither buboes nor petechiæ, and to make a difference in his prognosis of the termination of each case, and of the transmissibility of the disorder, according to the period of its existence as an epidemic. M. Dubois denied that during an epidemic the average number of endemic diseases was materially diminished or modified, and had in proof mentioned the cholera. M. Prus would also appeal to the physicians who had attended the hospitals of Paris during that fatal year, 1832, and would ask them to be judges of the question. As to the prodromic affections which show themselves before epidemics, M. Dubois had boldly denied their existence. What answer could be made to so absolute a negation of so positive a fact? The report admitted the propagation of the plague out of epidemic centres, and had been led to adopt this opinion from the consideration of well authenticated cases, thirty-two in number, all of which were treated in the lazaretto of Marseilles by the surgeons and physicians of the establishment, who delivered daily certificates of the progress of the cases, and sometimes an account of the post-mortem examinations. These

[1] Vide "Eothen." In this highly interesting little volume will be found many illustrations of the assertion, and at the same time of the futility of the precautions taken by Franks in the east against *contact with compromised* individuals.

cases could leave no doubt in the minds of those who had read them, and it would be desirable they should be examined by a sub-committee, specially named by the Academy for the purpose. The learned reporter then proceeded to explain by what ingenious mechanism M. Dubois had reduced to *four* the thirty-two cases of the report. He had rejected cases in which the plague had appeared three weeks, a month, and more, after the patients had left the centres of epidemic infection; thus admitting an incubation of the disorder which would necessitate quarantines of a disastrous length. Now, the commission believed the incubation never lasted more than eight days, and referred to propogation out of epidemic centres all instances in which the disorder had broken out after a longer period.

Professor Adelon requested the president's permission to move to order. The debate was acquiring a personal turn, which would have been avoided had the learned reporter stated the opinions of the minority of the commission. If matters were allowed to proceed, the debate would be drawn out to an interminable length. M. Adelon, therefore, moved that the general discussion be dropped, and the conclusions be at once examined.

The motion was not seconded, and therefore fell to the ground. M. Prus was requested by the president to proceed.

The reporter, after entering at some length into the details of the cases of plague communicated on board of ships homeward bound, and in the lazarettoes of Marseilles, closed his remarks by the following observations:—He felt disposed to adopt M. Dubois' suggestions on the importance of the sanitary improvements of the city of Marseilles, but could not concur with his colleague in throwing any blame upon Mehemet Ali. The Pacha's very existence had been threatened seriously since the year 1841, and it was only natural that his first efforts should be directed towards his own preservation; but considerable gratitude was due to him for his persevering endeavours to naturalise in Egypt the arts of European civilisation. He had called to his court European physicians; he had founded hospitals and quarantines, and used energetic measures to enforce the execution of his sanitary regulations by the Ulémas. The Egyptian sovereign had even founded in Paris an Egyptian school, which he supported at considerable expense, and the pupils would carry home the ideas and feelings, the arts and sciences of Europe. True, much remained to be done; and the picture of the misery of the Fellahs was not exaggerated in the report. The Fellahs are probably the most unfortunate men on earth, and the contempt of human life in Egypt is much to be deplored. All this is too true, but it did not follow that Mehemet Ali must be considered as a fanatical Turk, systematically opposed to all improvements.

M. Ferrus, president of the commission, observed that the members who had attacked the report had criticised it severely, without proposing anything to replace the conclusions they had blamed. Egypt is undoubtedly the cradle of the plague, and Mehemet Ali is disposed to do everything in his power for the improvement of the country; but he has to struggle against the fanatical prejudices of a superstitious population. If the commission were to adopt the opinions of its adversaries, it should not only demand for Egypt the abolition of despotism, but civil and religious emancipation. Mehemet Ali met with great obstacles; let us hope that Ibrahim will be able to overcome them, and let not the Academy attempt a new crusade against Egypt and its Pacha. After some general remarks on the doctrine of contagion, wherein M. Ferrus reproduced several arguments already stated by the reporter, he concluded by saying that what the commission asked for was merely a diminution in the quarantines, and the adoption of other measures calculated to prevent that diminution from having any dangerous consequences. M. Ferrus moved that the debate on the general parts of the report be closed.

The motion was adopted, and the meeting adjourned at five, p. m.

HOTEL DIEU.

Clinical Lecture on Carcinoma of the Stomach, by Professor Chomel.

About a month since we received into our wards a patient who presented a remarkable condition of general anæmia, complicated with anasarca. We tested the urine, and did not find it to contain any albumen. Not only was the skin extremely pale and colourless, but also the mucous membranes, and on each side of the neck a venous murmur was distinctly appreciable to the stethoscope. We exhibited preparations of iron, but no other improvement was obtained than a diminution of the anasarca. On further examination we found that the anæmia in this case must be referred to an organic affection probably of the stomach. The epigastric region was the seat of intense pain on the slightest pressure, and the patient told us that during three years he had been frequently subject to nausea and sickness. The vomited matter generally consisted of a transparent slimy mucus, often equal to four or five ounces in quantity. This sickness has perhaps occurred seven or eight hundred times, and the food has never once been returned. This is a remarkable and interesting fact, because the vomiting generally took place while the stomach contained food, and because it shows the elective action of the viscus, which throws off noxious matter, and retains alimentary substances. At the beginning of his complaint the patient had for several days a black diarrhœa, and, a twelvemonth since, the nature of the matter rejected from the stomach by vomiting acquired a greenish hue, at the same time the strength gradually diminished, and his appetite disappeared.

At present the digestive functions seem considerably impaired. No solid nutriment can be given the food consisting merely of soup and broth. The epigastric region is slightly depressed, and palpation readily detects an unusual resistance, due to the presence of some morbid change in the abdominal viscera. What may be the seat of the organic lesion? The absence of modification in the secretion of bile prevents us from believing in disease of the liver, and the vomiting, the diarrhœa, the black (i. e., hemorrhagic) motions, induce us to admit the existence of organic disease of the stomach. It is not cancer of the pylorus. In this affection the vomiting occurs at distant intervals, and the rejected matter is extremely abundant, on account of the enlargement of the viscus. It is not a cancer of the cardiac orifice. In this form no tumour is perceptible. The case before us is most probably a scirrhus of the anterior wall of the stomach.

One of the earliest signs of cancer of that organ is certainly that sickness which we observed in the present case, followed by the rejection of mucous, slimy matter. At least one half of the persons who are affected with this symptom become, at a future day, victims to carcinoma of the stomach. Hematemesis is also a most significant sign. A portion of the blood passes out of the pylorus, and communicates to the fæces that black colour analogous to ink, which alarms the patient, and which can hardly ever leave the diagnosis doubtful. We do not mean to say that in all cases of hematemesis cancer of the stomach is present. You will meet with instances of vicarious menstruation, in which women throw up blood at the catamenial period. Some cases are also observed in which blood is vomited without any appreciable organic lesion. Thus, Boraldier, our great musical composer, was for twenty-five years subject to gastric hemorrhage. He died of consumption, and the stomach was found healthy.

HOSPITAL NECKER.

Strangulated Hernia—Case; by M. Richet.

A woman, aged forty-five, of a vigorous constitution, was admitted into hospital in consequence of the incarceration of a crural hernia, seated on the right side. The patient had for several years also borne a crural hernia on the left side. The strangulation had lasted forty-eight hours; leeches, baths, and the taxis, had been applied. The operation was immediately performed, but incipient peritonitis was detected, from the presence of the friction sound in the right iliac region. The incision was performed in a parallel direction with the axis of the thigh, and two layers of the fascia superficialis were divided. The fascia transversalis was also cut through, and, on incision of the sac, a small quantity of serum escaped. The constriction was so tight that the extremity of a probe-pointed knife could not be passed between the gut and the ring. With a pair of scissors the sac was divided from its fundus to its neck. The crural ring was not the cause of constriction, but one of the orifices of the fascia crebreformis. The stricture was removed; the intestine was purple coloured, but still elastic, and was therefore returned into the abdominal cavity. The sickness and colic ceased, and, during the course of the evening, a purgative enema brought on two motions. The next day the patient was doing well, when the hernia on the left side became strangulated, in consequence of the repeated efforts of defecation. The abdomen was distended, the pulse small and frequent, the vomiting incessant. After some difficulty, the intestine was reduced; forty leeches were applied on the abdomen, and an enema, with the infusion of tobacco, was exhibited, but the patient died a few hours after without any new evacuation.

On post-mortem examination, the anatomical characters of peritonitis were detected in the pelvis, and the circular furrow of the last strangulation was noticed on the surface of the intestine. The convolution, reduced after the operation, presented a singular alteration. Its cavity, a little above the spot of the stricture, was divided by a perpendicular diaphragm, perforated in its centre by a small orifice, admitting with difficulty the extremity of the little finger. This diaphragm had been produced by a complete circular division of the mucous membrane, which had ascended by a mechanism similar to that by which the internal coat of an artery rises within the cavity of the vessel after ligature. The small intestine was considerably distended above the obstacle.

A Test for the Presence of Sulphate of Quinine in the Urine.—From some experiments on the subject, Dr. Hillairet and M. Quévenne have come to the following conclusions:—1. Whenever urine containing sulphate of quinine is alkaline or neutral, the iodurated hydriodate of potass (iodure ioduré de potassium) does not cause any precipitate. 2. When the urine containing the salt of quinine is acid, the re-agent causes an abundant deposit. 3. The addition of an acid to alkaline or neutral urine gives it again the property of betraying, by a precipitate, the presence of sulphate of quinine, on the addition of the hydriodate of potass.

Monstrous Conformation.—We have received the following details of the conformation of the infant presented to the Institute by M. Velpeau on the 1st June (see *Medical Times*, p. 185, vol. xiv):—The child was born at Guintas de Corveiras, in the Algervas, on the 5th of September, 1845, of healthy parents. The mother, aged twenty-two, had already borne two well developed children, and did not recollect that her last pregnancy was attended with any peculiarity. Her confinement was favourable, and the accouchement was natural. The child was in perfect state of health, and of lively disposition. The head, body, and arms were fully developed, and well proportioned; also the inferior extremities, at least the two legs which occupy the usual situation. The third leg was evidently formed by the fusion of two limbs under one integument, and was placed behind the two others, so as to be completely concealed when the child lay on his back. This third limb, equal in length to the two others, was about twice as thick in its upper half. The foot was terminated by ten toes, directed forwards. This supernumerary extremity was cold, and dull to sensation. Its attachment was an osteo-cutaneous stem, about two inches broad, and one inch in length, continuous with the pelvis, the bony elements being formed, as far as could be discerned through the skin, by the sacrum, of a second and incomplete pelvis. In front of the natural pelvis, at about two inches interval, were placed two penes, each furnished with a scrotum, and one testicle. Each presented a urethra, the two ducts appearing to communicate with one bladder.

Dan M'Carthy, D. M. P.

Spain.

ANATOMICO-PATHOLOGICAL OBSERVATIONS UPON PHTHISIS.

By D. José Seco Baldor.

(Concluded from page 208.)

Case 17.—*Tubercles, Chronic Pulmonary Catarrh: Acute Pleuro-pneumonia.*

A soldier, of weak constitution, and badly-formed thorax, was admitted into the Hospital of Saint Isabel, in the beginning of December, 1836. In the preceding August, he had been the subject of scabies: which, disappearing spontaneously, had been succeeded by another eruption: for this, cold baths had been successfully employed. He had, then, continued fever, with evening-exacerbations, but neither cough nor pains in the breast. Thirst and appetite moderate; tongue white and moist; bowels indolent. The intellectual faculties were unimpaired. He had no pain, and the source of the fever was not evident.

After the lapse of about fifteen days, great heat was felt in the breast, especially at night. Cough came on, at first dry, and afterwards accompanied by mucous sputa. The fever increased, with thirst, loss of appetite, and visible diminution of flesh and strength. There was, occasionally, diarrhœa: respiration short and difficult. Nothing was detected by percussion and auscultation. The chest was everywhere sonorous, and the respiratory murmur audible. Yet the air penetrated with difficulty, and not very far, into the lungs.

January 10, 1837.—Pain in the whole left side: reclination on the right. Dyspnœa great; cough frequent, with viscid and sometimes bloody expectoration. Pulse very quick; cheeks flushed; much thirst; anorexy. Percussion painful, but sound clear, over the whole left side, especially in the anterior region: the right equally sonorous, without pain. Respiration was short and frequent; *râle* nowhere perceptible.

13th.—*Mucous râle in both sides*: expectoration more copious, and less bloody.

14th.—Reclination, hitherto invariably observed on the right side, now dorsal. Dyspnœa extreme; expectoration scanty and difficult: cheeks livid; countenance sunken; voice weak and hollow; pulse excessively small and frequent. Death, during the night.

NECROTOMY.

Thorax.—Both lungs adherent to the ribs. Pleuræ, in their whole extent, thickened and opaque; and the left costal, red. About half a pint of bloody serum in the cavity of this side; and, in the superior part, a collection of serous pus, sustained by a pseudo-membrane which connected the vertex of the lung with the ribs. Both lungs full of crude tubercles; and divers portions (of their substance) indurated and obstructed. In some points of the left lung, a recent sanguineous congestion, interposed sometimes between the healthy, sometimes between the indurated, portions of the organ. Bronchial membrane, in various parts, of a deep-red colour, and smeared with a little not very thick mucus.

Abdomen.—A small quantity of bloody serum in the peritonæum, without any other trace of peritonitis.

REFLECTIONS.

The present case is wholly favourable to the opinions of Laennec and of Bayle. In those previously narrated, everything concurred to prove that the tubercles were posterior (in date) to the phlegmasiæ, with which they co-existed. Here, on the contrary, are a phthisical constitution, numerous tubercles developed in both lungs, chronic catarrh followed by slow fever, and, finally, acute pleuropneumony which destroyed the patient. Previously, there must have existed chronic pleurisy; for, on no other principle, will the thickening and opacity of both pleuræ, and their adhesion to the lungs, admit of explanation. Whether this chronic pleurisy occurred previously, or subsequently, to the tubercles, it is impossible to decide. Most probably, it was subsequent: for, in this instance, the signs of chronic catarrh and pleuropneumony made their appearance long after those of the tubercles. That which happened here, occurs, also, in many other cases: so that the opinions of Bayle and Laennec would be correct, if they were not too indiscriminately applied.

Case 18.—*Tubercular Diathesis, manifested in the Blood during Life, and in various Organs after Death.*

A young, robust, and ruddy soldier, was admitted, June 10th, 1836, into the Hospital of St. Isabel. He had been seized with profound melancholy, in consequence of having left behind him, on his entrance into the army, four orphan brothers, of tender age.

He now complained of headach, of some days' duration, and constipation of the bowels. He had neither thirst nor fever; and the tongue was natural. Diet of broth; a demulcent potion. Lotions of oxycrat to the forehead; sinapisms to the lower limbs: emollient laxatives.

13.—A saline purgative.

14.—Much relieved; and took soup.

After a few days, the pain in the head was greatly aggravated. Abstinence, and a second purgative, had no effect. An attack of fever, which supervened, gave way to, and the headach was signally relieved by, two blood-lettings.

The first blood-letting yielded a dusky soft coagulum with little serum. On its surface, were seen divers white granules, of the size and ordinary figure of tubercles: they penetrated very little into the interior. On breaking up the coagulum, no other (bodies of the same kind) were discovered. This condition of the blood, and the spherules which it contained, excited great attention. Unfortunately, the fluid, resulting from the second venesection was, contrary to the directions of the physician, thrown away; and the opportunity of subjecting it to a more rigorous examination, consequently lost.

After these general abstractions of blood, forty-eight leeches were applied, without effect, to the temples and the neck; and four blisters, in succession, to the thighs, and calves of the legs. The pain continued, with delirium in the night, and sometimes by day. The power of motion, the sentient and intellectual faculties became gradually impaired; the pulse slower: and the patient sank, at last, into perfect stupor and insensibility to pain. Twenty-four hours before death, he quite lost the ruddy complexion which he had hitherto preserved. The pulse became exceedingly small and frequent: stertor supervened; and, at half past three, p. m., of the 21st, he died. The paralysis was greater on the right side than on the left. Respiration continued natural to the closing struggle; and the thorax sounded everywhere well.

NECROTOMY, SIXTEEN HOURS AFTER DEATH.

Exterior.—Limbs extended; and all the articulations rigid.

Head.—Adhesion of posterior half of both cerebral hemispheres to dura mater. Falx cerebri adherent, also, to it by both surfaces: and this adhesion continuous with the preceding. Glandulæ Pacchioni larger than ordinary. Capillary vessels of the surface of the brain, considerably injected, especially in the posterior part. Many large bloody points discovered on transverse incision of the encephalic mass, as well of the tuber annulare and cerebellum, as of the proper brain. Veins of the lateral ventricles greatly loaded: a small quantity of serum in the posterior part of these cavities. No softening detected in the whole encephalic substance. Hyperæmia greater on the left side, than on the right.

Thorax.—One or two ounces of transparent serum in the pericardiac cavity. In the anterior and inferior part of the left ventricle, near its junction with the right, and from the apex, or point, of the heart, a white albuminous pseudo-membrane. Between the adherent layer of the pericardium, and the fleshy substance of the organ, situated on the anterior part of the right ventricle, near the base, two tubercles. The lobes of both lungs adherent together. Left lung adhering to the thoracic parietes, and full of miliary tubercles; but otherwise sound, and pervious to air. The right lung, of a livid-red colour, and exhibiting incipient hepatisation, in its two posterior thirds: anterior third, healthy. The whole contained many crude tubercles.

Abdomen.—In the liver, various sub-peritoneal tubercles, of the same size, aspect, and figure as the pulmonary. In the interior of the spleen, many more, resembling them; and, on its surface, a deposition of tuberculous matter, either in the shape of grains, like those in the interior of the organ, or of pseudo-membrane, of a dirty-white colour. On the surface, and in the interior, of both kidneys, some tubercles, like those of the lungs. None in the pancreas, testicles, mesentery, stomach, or bowels. The whole gastro-intestinal mucous membrane healthy.

Over greater part of the free surface of the diaphragmatic peritonæum, was scattered an infinite number of yellowish-white granules; at first sight, resembling flattened tubercles; but, afterwards, a kind of adipose secretion. To which of these two species of lesion, they belonged, it was impossible to decide.

REFLECTIONS.

Without indulging in many comments which this extraordinary case is calculated to suggest, a circumstance may be noted; of which no example has been recorded by the best writers upon thoracic diseases, nor in periodical works. The blood drawn, in the first venesection, contained a matter which, in its consistence, resembled tubercle; and, subsequently, tubercles were discovered in both lungs, in the heart, liver, spleen, kidneys, and even the diaphragmatic peritonæum. This coincidence must powerfully attract the attention of practitioners; and, if confirmed by future observation, [illegible] to demonstrate that tubercles are, in various instances, altogether independent on irritation, and consist solely in a morbid secretion, or rather depuration, of the blood; which contains tubercular matter, more or less completely formed. And thus, as in the present case, it is met with, deposited in healthy, as well as in diseased, organs, and in parts which have not been, as in those which have been, attacked by inflammation.

Had not this patient been prematurely destroyed by an acute disease, wholly unconnected with the tubercles, they would, probably, have been developed in other organs.

The most striking feature of the case is, that the subject of it had no predisposition to tubercles. On the contrary, he possessed a sanguineous temperament; was robust, muscular; and had a well-formed thorax. So that the tubercular diathesis, of which the most evident traces existed in the blood and diver organs, must have been not congenital, but accidental.

Case 19.—*Accidental Phthisis, terminating favourably.*

On the 21st of April, 1837, an Andalusian soldier, aged thirty-nine, came under observation in the Hospital of Saint Isabel. He had a well-formed thorax, finely-developed muscular system, gruff voice, and regular shape. For some time past, he had suffered from pains in the chest, hips, and thighs, slow fever, cough, puriform expectoration, dyspnœa, and perspirations of the upper, with coldness of the lower, half of the body. He, moreover, exhibited great debility, paleness of complexion, flaccidity of muscle, and evident emaciation. His sleep was disturbed by the cough; appetite impaired; thirst, at times, excessive, with torpidity, and difficulty of motion, of the lower limbs. In fact, there existed marked symptoms of chronic rheumatism, with pulmonary phthisis.

As remedies for the rheumatism, warm baths, and divers external applications, had been used: while the pulmonary affection had been combatted, at first, by blisters, and, subsequently, by the institution of four issues in the thoracic parietes. By these means, the rheumatic pains had been somewhat relieved; yet the pectoral symptoms were aggravated.

The case now being regarded as one of advanced and incurable tubercular phthisis, it was deemed necessary to prescribe only a milk-diet, with pectoral potions, narcotics, emollient cataplasms, sedative liniments, and the application of external heat: the latter, with a view of relieving the pains and sense of cold, experienced, by the patient, in the lower limbs.

Contrary, however, to all expectation, the fever and cough were greatly relieved. The expectorated fluid became simply mucous: and the dyspnœa, perspirations, and pains, were signally diminished.

May 21.—The following results were afforded by auscultation: respiratory murmur clear, and even puerile, over the whole right anterior region, and

in the superior half of the left anterior; but extinct in the inferior half: pure and evident, in both lateral regions, and in the right posterior. In a circumscribed space of the left posterior (region two fingers' breadth below the inferior angle of the scapula, the respiration and cough were most evidently cavernous; and, in the same situation, there was manifest pectoriloquy, with mucous *râle* in the left scapulo-vertebral region, respiration and cough cavernous, with doubtful pectoriloquy, and without *râle*. The sound of the thoracic parietes was everywhere clear.

From this time, the patient gradually improved. The pulse became less frequent; cough quiet, except at night; expectoration mucous and scanty perspirations, with pains in the breast and limbs, gone; the latter had, also, recovered their warmth and power of motion: dyspnœa and thirst had disappeared; appetite had returned. The patient digested well his progressively augmented allowance of food: but it was long ere he regained his healthy complexion, and original firmness of muscle.

July 26.—He left the hospital; exhibiting all the characters of health, without cough, cavernous respiration, pectoriloquy, or other vestige of either the pulmonary or the rheumatic affection.

REFLECTIONS.

From the issue of this case, it may be doubted whether it had been tubercular phthisis, or, simply, chronic pulmonary catarrh, or circumscribed pneumonia, terminating in abscess or pulmonary excavation. The existence of phthisis was evident; if hectic fever, with dyspnœa, cough, puriform expectoration, colliquative sweats, debility, loss of colour, and marasmus, may be regarded as constituting the characters of the disease. But whether the phthisis were tubercular, or the result of common suppuration of the left lung, it is impracticable to determine. Of the existence of chronic catarrh, there can, however, be no question. But, in addition to this, there were one or more caverns, whether tuberculous or otherwise; and thence principally resulted the fever, perspirations, and other pulmonary symptoms. The proof is that these symptoms were most clearly co-existent with the pectoriloquy, and cavernous cough and respiration, in a circumscribed space. Such would not have been the case had these phenomena resulted from bronchial dilatation. For the disappearance of such dilatation, even if it were possible, would have required a much longer time than the cicatrisation of a cavity,—a far more common and easy process; as is well-known by all who are deeply-versed in anatomico-pathological investigations.

This fact is published with the view, not of blazoning abroad the cure of a phthisical patient, but of demonstrating, as Laennec and other authors assert, that phthisis is curable. In the present case, the (genial) atmospheric temperature, the mild and palliative treatment, and, more especially, the excellent constitution of the patient, contributed greatly to his recovery. If the phthisis had been constitutional, recovery would have been impossible; for caverns, once formed in lungs filled with tubercles, would never have cicatrized.

Again, if this patient were the subject, not of tubercles, but of simple chronic pneumonia terminating in suppuration, it is very evident that the term, phthisis, cannot be synonymous with pulmonary tubercles: since, in the present instance, the symptoms were precisely identical with those which phthisis exhibits.

Italy.

Dr. Linoli, in a recent number of the *Annali Universali de Medicina*, relates several cases of poisoning by arsenic successfully treated by means of large draughts of white wine. The following is an abstract of the report. A healthy countryman, after returning from work, prepared for his supper a soup thickened with chesnut flour, and seasoned with bay salt. In this salt arsenic had been mixed in the proportion of six grains to the ounce. He had scarcely finished, when he experienced a general feeling of lassitude and nausea, and after a time such a weakness in his legs that he was with difficulty able to get into bed. He had drank only water with his meal, which had been composed of porridge. After he was in bed the symptoms increased in severity. His stomach seemed to "jump," and severe pain accompanied by vomiting ensued. The matter vomited was fluid, apparently the water he had drank, and after its discharge he felt relief. The pains soon returned, however, and were very acute over the whole belly. He attempted to rise, but was unable to stand in consequence of vertigo and the weakness he felt in his legs; he dragged himself to a cupboard, however, and drank a considerable quantity of olive-oil, after which he vomited a second time with relief; he repeated the draught of oil, and vomited a third time, discharging on this occasion the porridge he had eaten (the length of time after his supper is not stated); after this he had evacuations from the bowels. These discharges weakened him so much that he felt himself fainting; he therefore wished to take something, and eat two eggs, which seemed to relieve him. He in vain endeavoured, however, to regain his bed. his legs trembled, and his weakness was extreme. A little time afterwards his pains returned; he eat two more eggs, and felt relieved. The night passed thus, and towards morning he succeeded in opening the door of his hut, and returning to his bed. Early in the morning a fellow workman who called him to go to work arrived. The sufferer begged him to call Dr. Linoli, and gave him the remainder of the porridge, which he took home to his family, and shared with three of his children. The same symptoms attacked this man and his three children. Thinking, however, that he should relieve the extreme weakness he felt, he drank a flask of white wine, with relief to the symptoms. The pains having returned, he drank more of the wine with further relief. The children vomited violently, and their mother encouraged this action by means of large draughts of olive oil. The porridge having been discharged by the assistance of the oil, white wine was administered to them with success. The father of these children, seeing the benefit derived from the white wine, sent some of it to his fellow workman who had been first attacked. This man drank it also, and felt instant relief. A judicial inquiry took place into these cases, at which it appeared that the salt mixed with the porridge contained a considerable quantity of a white powder, easily distinguishable by the naked eye. Separated from the salt by its solution in cold distilled water, and submitted to the proper reagents, and to Marsh's test, this powder was proved to be arsenious acid. About eleven ounces of the salt were seized, and the quantity of arsenious acid contained in each ounce amounted to six grains. A more than sufficient amount of arsenic to produce death would, therefore, be taken if the quantity of salt used was as much as one ounce, and thick porridge made with chesnut flour requires a considerable quantity of seasoning. M. Linoli remarks that the dose of arsenic taken in these cases was in all probability not sufficient to cause death, but at the same time he lays great stress on the benefit derived from the use of the vinous stimulus. Dr. Linoli attended all the cases.

⁂ We should be more inclined to refer the favourable termination of these cases to the free vomiting taking place early, and to the fact that the porridge taken was of a very thick and glutinous consistence, thereby preventing the arsenic from coming in contact with or adhering to the mucous coats of the stomach. We know of a circumstance in which nineteen labourers in the harvest-field partook of dumplings made with flour containing arsenic, which had been carelessly placed to destroy rats. Although these persons were at a considerable distance from medical aid (which reached them about two hours after the meal), they all recovered—a result due to the hard nature of the dumplings allowing the poison to be discharged by vomiting, without coming in contact with the lining of the stomach.

England.

[The following are the only articles of interest to the profession in the last two numbers of the *Medical Gazette*.]

KYSTEIN.—A long article, by Moller, of Konigsberg, on the value of kystein as a sign of pregnancy, translated from *Casper's Wochenschrift*, may be reduced to the following facts. That we are unable to draw any definite conclusions from the presence or absence of kystein in cases where the other signs of pregnancy are doubtful. This, Dr. Möller endeavours to support by the relation of two very inconclusive cases, in which kystein was present, the author *believes*, without pregnancy. In the first case the uterus was considerably enlarged, but of somewhat irregular shape. The os uteri was altered in form. The uterine enlargement subsided on the "*sudden*" appearance of a profuse menstrual discharge. Of this the author (or his translator) says, "There was nothing to lead to the supposition that an abortion had occurred in this case, for during the *hemorrhage* no clots were ever discharged, nor did the diminution in size of the tumour take place '*suddenly*,' but gradually, although in a comparatively short time.' '*Unfortunately*' the condition of the breasts was not observed. The second case was that of a woman, aged forty, who died shortly after of tubercles in the brain. In this patient there was no suspicion of pregnancy: she was excessively weak, had impaired memory, and great confusion of intellect; her pulse was rapid, and skin dry but cold; she passed an enormous quantity of urine, and had an insatiable thirst. Her urine, examined only on account of its possibly being diabetic, was pellucid, neutral, of sp. gr. 1006, and contained very little solid matter, and no sugar. "A portion of it having been accidentally kept for two days, a pellicle was found to have formed on it, which in all respects was similar to kystein." No further experiments were made on the case. The remainder of the article (which occupies five pages in the *Gazette*) is a mere summary of what is already well known on the subject of kystein.

SECONDARY INFLAMMATION.—Mr Lee, speaking of the effects of secondary inflammations following local injuries or surgical operations, remarks that, the commencement of the disease is marked by a sudden change in the manner and appearance of the patient, accompanied by much febrile excitement or by extreme depression, a severe rigor is usually the most prominent symptom, and is followed in some cases by a very peculiar heat of skin, and in others by profuse clammy perspirations. The rigor may be repeated at irregular intervals, but occasionally it recurs about the same hour for three or four days in succession, and in a few instances it is not observed at all. The depression is indicated by great anxiety of countenance, a want of tone in the pulse, an extremely listless manner, and sometimes by a tendency to syncope. The tongue becomes generally dry and brown, furred in the centre, and red at its edges, or in other instances it presents a coating of a pasty yellowish-white colour. The skin frequently assumes a dusky-yellow appearance. The pulse varies much in frequency in different cases, and at different times in the same case, but generally it is very rapid, especially when accompanied by much heat of skin. The pain is occasionally severe, and referred exactly to the spot which subsequent examination proves to have been the seat of the secondary inflammation, at other times the pain consists in general ill-defined sensations of short duration, but recurring at irregular intervals. Vomiting may occur, and diarrhœa is often present, generally profuse, and little under the control of remedies. It is often accompanied by relief of the other symptoms. The intellect is seldom affected at first, but the patient is subsequently, in severe cases, restless, and delirious, and seldom fails to become comatose. The symptoms follow each other rapidly, and metastasis of the inflammation to different organs is of frequent occurrence. Secondary inflammation generally happens in persons who have been debilitated from any cause, and especially in persons who have disease of the spleen. Mr. Lee then gives the following table of the relative frequency in which morbid appearances were found after death in different organs. The cases examined amounted to twenty-three:—

Increased vascularity or congestion of the brain	in	5 cases
Inflammation of the lungs	in	6 cases
Secondary affection of the lungs,	in	11 cases
— of the liver	in	2 cases
— of the spleen	in	1 case
— of the kidney	in	1 case

Peritonitis	in	1 case
Gangrene of the skin	in	4 cases
Effusion of lymph and serum without pus	in	4 cases
Pus in the veins	in	4 cases
Pus in the joints	in	6 cases

PAINTER'S COLIC.—Mr. Evans relates a case of colica pictonum occurring in a man, aged twenty-seven, tall and muscular, and naturally of florid complexion. He had worked two years and a-half at a whitelead manufactory, and was in the habit of drinking about a quart of beer a-day. He got drunk about twice monthly. He had before suffered from several attacks of colic, which, however, had always yielded to purgative medicines. Mr. Evans found him with the face pale and rather anxious; pulse 64; skin cool and dry; tongue moist, and slightly coated on its posterior part with a yellowish fur; gums spongy and tender, and between the teeth slight elevations of a leaden hue; abdomen hard, the muscles in a state of contraction, and he complained of a dragging pain in the loins and epigastrium; bowels had not been opened for a week. The attack had been coming on for a week or nine days; the man had lost his appetite, and had been costive. Before Mr. Evans saw him he had taken several doses of brandy and laudanum, besides eighteen purging pills, and two large doses of castor oil. Mr. Evans ordered an emetic, to be followed by two pills every two hours, containing one drop of croton oil in each, with calomel and colocynth, and an enema of gruel and *goose grease* (?) to be administered immediately. The bowels were unrelieved by this treatment, which was continued all day, two more enemata being given, to one of which ten grains of extract of belladonna were added. Late at night Mr. Evans ordered diluted sulphuric acid and infusion of roses to be taken every two hours, which caused free evacuation of the bowels with great relief. Mr. Evans adds, that having an opportunity of examining the body of a colour-grinder, aged sixty, who had repeatedly suffered from attacks of colic, he was struck with the smallness of calibre of the large intestines. Their coats were not thickened, and they contained a considerable quantity of hardened fæces.

Scotland.

IDIOCY AT JENA.—Dr. Campbell, in a communication published in the *Northern Journal of Medicine*, states that he has been informed by Dr. Kompst, that at Jena, in the Grand Duchy of Weimar, Germany, a large number of idiots and deformed individuals are to be found. This fact is, by the medical men of the place, coupled with the circumstance of there being brewed at Lichtenhain, a neighbouring village, a very strong beer of pleasant taste, which is a great favourite with the inhabitants of Jena. This beer is very intoxicating, and the state of intoxication produced by it is far more violent than that brought about by any other beverage in common use. These highly intoxicating qualities of the Lichtenhain beer are ascribed to belladonna, which it is said the brewers mix with the beer. Now, no day passes without some of the inhabitants of Jena returning home in the evening hightly intoxicated; and the idiotic and deformed children are supposed to be the offspring of fathers who begot them in a state of intoxication, produced by the beer of Lichtenhain.

INSANITY CAUSED BY INJURY TO THE HEAD.—Dr. Robertson describes, in the *Northern Journal of Medicine*, a case of moral insanity, the result of an attack of acute mania, complicated during its progress with monomania, and which was originally produced by a fall from the mast of a ship, after which the patient was never free from pain in the part of the head which had been injured. Dr. Robertson examined the head, and discovered a very distant depression on the posterior superior margin of the right parietal bone, which it was, in consultation, decided to remove by the trephine. The operation was performed by Mr. Furness, and was borne well by the patient. The portion of the cranium removed was healthy in appearance on both of its surfaces. It adhered very firmly to the dura mater, requiring considerable force for its removal. It was altered considerably in form, appearing to have been indented, rather than fractured, which is not improbable, seeing the accident occurred to the patient when only thirteen years of age. Since the operation, Dr. Robertson reports that the man's conduct was in every way improved. He has had no bursts of passion; answers civilly when spoken to, and is grateful for the relief afforded him. He looks forward with pleasure to his return home, which will take place as soon as the weather improves. He has, for the last fortnight, been working in the farm, and states, that since the operation, he has been free from pain in the head, under which he formerly laboured.

NECROSIS OF THE JAW-BONE FROM THE FUMES OF PHOSPHORUS.—Dr. Balfour, in the *Northern Journal of Medicine*, describes the occurrence of necrosis in the jaw-bones, caused by continued exposure to the fumes of phosphorus, in persons employed in the lucifer manufactories. The dipping the pieces of wood in the phosphoric mixture, and the drying the matches afterwards, it appears are carried on in an ill-ventilated room where the girls are who are employed in the factories, and who pass from twelve to thirteen hours daily in these rooms exposed to excessive heat and the fumes given off by the phosphorus which is used. In each manufactory from three to four pounds of phosphorus are daily employed in the production of one to two millions of matches, the mere drying of which must give no inconsiderable quantity of phosphoric fumes, to which also must be added the quantity of meta-phosphoric acid, produced by the burning of sundry parcels, which, in spite of care, is no infrequent occurrence. It would seem that continued exposure to the phosphorous fumes for a length of years is requisite to produce the disease, as no cases were observed at Vienna until the manufactories had been at work upwards of eleven years. Scrofulous subjects suffer most, and in them the disease is most fatal. Almost all the girls employed have the gums more or less affected, and, at their junction with the teeth, a red ulcerated line, like that produced by mercurial salivation, is apparent. The pain in the jaws, where any is complained of, is generally mistaken for toothache, and for this teeth are frequently extracted, which are afterwards found to be quite sound. As the disease proceeds, the affected jaw-bone increases in size, and is painful on pressure. This is followed by swelling of the gums and cheeks, with an erysipelatous inflammation of the skin of the latter, which sometimes extends over the whole half of that half of the face, and even down on the neck. The patient becomes feverish, and the skin of the whole body, but particularly of the face, of a dirty yellow colour. The appetite declines, and thirst increases, with irregularity of the bowels. The pain extends towards the ear or temple, the flow of saliva is increased, and complete salivation even occasionally occurs. Some of the teeth become loose, the offensive matter oozes from between them and the gum, which also collects in portions of the jaw under the gum or skin, and, after burrowing for some distance, open outwards or into the mouth, forming numerous sinuses, which, on being probed, lead to a greater or less portion of bare rough bone. The loose teeth fall out, and the soft parts in the mouth are partially destroyed, so that a portion of the necrosed bone projects naked into the mouth, and from the copious secretion of pus, produces an unendurable stench. The general symptoms are those of great irritation, and in the hitherto observed fatal cases, those of confirmed and rapid phthisis. When the individual is robust, and the necrosis confined to a small portion of the bone, exfoliation takes place, and a gradual cure follows. On the contrary, when the individual is scrofulous, phthisis becomes developed, and the patient sinks under the combination, after an illness rendered more distressing by the horrid stench and unallayable pain accompanying it. The sections have hitherto given extensive necrosis of the jaws, and destruction of the soft parts, along with advanced tubercular disease of the lungs and intestines. The means employed have been in mild cases, the use of astringent washes, warm poultices to the swollen face, general warm baths, gentle exercise in the open air, bitter tonics, and a light but nourishing diet. When the process of destruction was advanced, spirituous and aromatic additions were made to the astringent washes, and the sinuses frequently washed out; when the salivation was profuse, the frequent use of cold w[illegible] was found to afford the most relief. The most powerful narcotics gave only slight alleviation of the intense pain, especially remarkable in disease of the upper jaw. In one case Dr. Sigmund touched the diseased bone with a hot iron; it exfoliated in four days, and the patient gradually recovered. The Government commission suggested the following measures as preventive of the disease:—1st, That the matches must not be permitted to be dried in the work-room, and, if possible, this must take place in one situated above it. 2nd. That every second hour the girls be obliged to wash their mouths well with acidulated water; and 3rd, That they be sent out twice a-day to take their meals and get some fresh air.

FRACTURE AND DISLOCATION OF THE CERVICAL VERTEBRÆ, AND FRACTURE OF THE STERNUM.—Mr. Brotherston describes, in the *Northern Journal of Medicine*, the case of a young man, who was found lying on the pavement, and was taken home, being supposed to be labouring under the effects of intoxication merely. He could speak and answer questions, but was quite unable to move the lower extremities, although he could move his arms to a considerable extent. The next day he complained of great pain at the crown of the head, with stiffness of the neck, and pain and oppression at the chest. In the evening of the second day, after the urine had been drawn off, he was raised up to drink a little water, when he gave a convulsive struggle, and expired. At the autopsy, Mr. Brotherston observed, on removing all support from the head, that it immediately fell to one side, so that whenever the occipital protuberance rested on the table, and support was removed, either cheek came in contact with the table, though cadaveric stiffening still remained throughout the body. When the head was pressed downwards, so as to press the vertebræ upon one another, and rotated, crepitus was heard. An incision was extended from ear to ear, and one directly backwards and forwards through the respective portions of the scalp. An immense quantity of blood was found extravasated between the scalp and the tendon of the occipito-frontalis muscle, immediately over the crown of the head. The skull cap was removed—it was free from fracture, and the membranes covering the brain, and the brain itself, were quite natural. No fracture or fissure was found in the base of the skull. On cutting through the integuments and muscles covering the spinous processes of the cervical vertebræ, the muscles and cellular tissue were found infiltrated with blood, and displacement forwards of the last cervical and incumbent vertebræ on the first dorsal was observed. The posterior ligaments were so torn as to expose the membranes covering the spinal marrow. The last cervical, and three first dorsal vertebræ were removed, and the following state of parts was seen:—There was found to be a fracture of the body of the first dorsal vertebræ through the middle, the upper part of the body adhering to the intervertebral cartilage, behind it and the last cervical, and overlapping the other half anteriorly. The inferior oblique processes of the last cervical were in front of the superior oblique processes of first dorsal, and the capsular ligaments were ruptured. The spinal membranes over the cord seemed to be entire, but the cord was flattened, and probably ruptured within the membranes. An incision was then made from the top of the sternum downwards, and in cutting through the textures covering that bone, no effusion of blood nor anything unnatural was observed; but on dividing the costal cartilages, and removing the sternum, it was found, on examining the posterior surface, that the entire bone was fractured right across in an oblique direction upwards and towards the left side, exactly at the juncture of the lower, with the middle third of the bone. There was no displacement, and no appearance of any injury on the anterior surface. The thick tendinous periosteum kept the two portions in complete apposition. There was considerable effusion of blood into the anterior mediastinum, and into the cellular tissue between the pleura and the bone around the seat of fracture. There was also effusion of blood on the external surface of the pericardium, but it did not extend to the internal surface of the membrane. The heart and lungs were in a healthy condition. Mr. Brotherston re

marks that the results of the post-mortem examination at once accounted for the symptoms; and after examining the place where the man was found lying, it easily showed how the accident occurred At the side of the foot-path there was a wall, and on the other side of the wall a stair ascending to a door level with the top of the wall, which is about ten feet high. It was supposed that he had ascended the stair, and fallen from the top of the wall on the pavement, the crown of his head coming in contact with the ground. His body then doubling over, his head had been pressed to his chest, and both neck and breast bone had given way. It appears a most extraordinary circumstance that instantaneous death did not ensue from pressure on the spinal cord at the time of injury, but it can be accounted for by supposing that the gradual yielding of the tissues, ruptured by the fall, allowed time for the body to fall back, before sufficient pressure to cause death had been exerted on the spinal cord. The sudden fatal termination of the case is easily accounted for by the additional pressure, which must have been made on the spinal cord, when the man was raised to get a mouthful of water after withdrawing the catheter. The case is interesting from the rarity of occurrence of fracture of the sternum, except by direct violence, either by pressure or gunshot wounds.

Iodine in Cutaneous Diseases.—Dr. Seller, in the *Northern Journal of Medicine*, remarks that iodine has been less used in the uncombined state in eruptions than in various forms of combination. As a means of improving the general health, and thus of calling forth the latent sanative powers of the constitution, few remedies will bear a comparison with iodine and its compounds. The iodine remedies, whether directly or indirectly, exert a powerful influence over the capillary and absorbent systems, and thus are peculiarly fitted to restore the action of the skin, in which both systems so abound, to a healthy state. From the remarkable effects of iodine medicines on the general health, greater influence might have been anticipated from the internal use of them than seems as yet to have been proved. The hydriodate of potassa, in particular, combines, to a signal extent, the properties of a tonic, sorbefacient, and alterative, such as might be supposed adequate to put an end to local diseases connected in their origin with constitutional disturbance. Perhaps its effects have not as yet been sufficiently tested in this order of diseases. However this may be, it seems certain that, as far as observation has extended hitherto, the local applications of the iodine remedies has gained a better name for utility in eruptions than their internal use. It does not however follow, that the effects of their internal use should not be studied; since it is often requisite, first to improve the general health, and then by powerful local means to destroy what has been not unaptly termed the habit of morbid action, which becomes established in the nutritive organs of the skin. Among the modes of applying iodine locally, is the iodine-bath; iodine, from two to four drachms; hydriodate of potassa, four to eight drachms; water, fourteen parts: use in chronic diseases of the skin in general. The iodine ointment, and the ointment of iodine and hydriodate of potassa of greater or less strength, and always weak at first, are useful in acne, porrigo, and scaly diseases. The combined vapours of iodine and sulphur are of much advantage in lepra and psoriasis, particularly in the local forms of psoriasis, and also in the tubercular eruptions. These vapours may be applied in the following manner —A powder is made of half a drachm of sulphur; seven grains of cinnabar; two grains of iodine. This powder is placed on a heated iron in the bottom of a jar large enough to receive the patient's leg or arm, when either is the part affected, and the iron being covered with a grating to protect the foot or hand, the part is introduced quickly, and the top of the jar covered to prevent the vapour from escaping. The part is to be kept in the bath from fifteen to twenty minutes, and the application is to be repeated three times a-day. After a few days the strength of the bath may be increased. The same remedy has been used with success in elephantiasis arabica. An ointment of iodine and sulphur is also beneficial in acne, porrigo favosa, and porrigo scutulata; ioduret of sulphur, twenty to thirty grains; lard, one ounce.

Ireland.

Abscess with Fistulæ in the Female Breast.—Dr. O'Ferrall, in a clinical lecture, published in the *Dublin Hospital Gazette*, describes the deep-seated abscess of the breast, evacuated by numerous openings, or a succession of abscesses producing a number of fistulous canals, and the treatment of such cases by a new mode of compression. The condition of the mammæ is as follows.—The breast is enlarged, discoloured, and disfigured by a number of fistulous openings, discharging purulent matter. The magnitude of the part is different in different cases; but is sometimes such, as to exceed two or three times that of the opposite breast. Its figure is irregular, presenting numerous prominences and depressions, giving to the organ an unsightly and misshapen appearance. The colour of the integuments is unequally distributed—patches of a reddish hue appearing irregularly mingled with the natural tint of the skin. A number of fistulous openings are visible on the surface, each discharging purulent matter. The pus discharged is generally what is termed healthy, that is, uniform in colour and consistence. Occasionally a tinge of blood is mingled with the discharge, if the part has been subjected to much handling or pressure. The orifices near the nipple, in some instances, yield a milky fluid mingled with the pus. This has occurred, when the period of lactation had not ceased. The breast is also unusually weighty. Its consistence is unequally hard—and in some portions has a scirrhous density. The nipple is nearly natural. When pressure is made on different portions of a breast in this state, a free discharge of matter takes place from the openings in communication with the part compressed; and the fingers sink into the yielding part. If a probe be passed into each of these openings, it will only pass a short distance, unless the instrument be curved. If the curve be adapted to the course of the fistulous canal, it may sometimes be made to pass through the entire substance of the breast, to a point behind the gland. In fact, the depôts of matter lie very deep, and the fistulæ pursue a very tortuous course before they reach the surface. The history of a case of this kind, is that of a succession of abscesses. The opening, spontaneous or artificial, of each of those depôts, has been followed by relief. A new abscess soon follows, and is accompanied by a fresh attack of pain and pyrexia. The evil results from this state of the breast are two-fold; local annoyance from the pain and tenderness, the copious discharge, and the increased weight of the breast, and general mischief, from the exhaustion which the continued discharge induces, followed by hectic, and the formation of tubercle in constitutions, predisposed to pulmonary disease. The practice recommended in such cases by Mr. Hey, of Leeds, the only author who Dr. O'Ferrall says, been directed attention to this particular state of the breast, is most, formidable, and such as few women would submit to. Mr. Hey states that the cure cannot be accomplished unless the course of the sinuses be traced, and each laid open completely, however numerous they may be, and tortuous in their windings through the organ. He insists on this operation as indispensable, and even admits that in doing it as it should be done, the breast may be divided into several pieces. This is a formidable operation, the shock of which must have been a severe trial to the constitution of a patient already much reduced by an exhausting malady. The extent to which the organ was incised may be inferred from his saying, that when any portion of the breast was thus insulated, and rendered pendulous, his remedy was to remove it altogether. Dr. O'Ferrall is of opinion that this operation was adopted by Mr. Hey only in consequence of the utter failure of pressure in such cases, and because there then remained no other resource against a disease, to which the patient must unevitably fall a victim. Pressure, applied in the ordinary way, or antero-posterior pressure, is of great service in sinuous ulcers in other situations, and in those of the breast, when superficial, and few in number. But, in cases like that now under consideration, in which the source of the matter is deep, the fistulæ numerous, and winding in every direction through the breast, antero-posterior pressure will be merely a source of disappointment. This mode of pressure, however dexterously applied, has merely the effect of altering the figure of the fistulous canals, forcing them into angles, and thus preventing the escape of the pus, secreted by the more distant portions of the pyrogenic membrane. The consequence then is, that a new depôt is formed; and a fresh attack of fever is developed, until the matter makes its way, in some other direction, to the surface. Antero-posterior pressure, besides being thus inefficacious, is liable to another objection—it is extremely uncomfortable to the patient. It restrains the movements of the chest, and embarrasses respiration. The plan for applying compression recommended by Dr. O'Ferrall, is as follows:—The surgeon having carefully pressed out the matter from all the fistulæ, should direct his assistant to grasp the breast gently in both hands, and draw it forwards as far as possible without causing pain. A breast greatly enlarged will, in this manner, admit of a remarkable degree of elongation. While the organ is held in this position, he should pass a strap of brown soap plaster, an inch and a quarter broad, round the part nearest to the chest, beginning underneath, and making the straps cross each other on the chest. Other straps of plaster are to follow in succession, each covering a portion of the one preceding, until he reaches the anterior part of the mamma, where a space is to be left for the discharge of the matter through the fistulous openings. He will next apply small compresses over the situations, where he had previously felt depressions corresponding to the depôts within; over these compresses a few more straps of plaster are to be applied. He will next take a double-headed roller and pass it from below upwards, so as to make it cross on the chest, and passing under the arms, return over the shoulders to the breast again. This roller is not to be applied with any degree of force. It is a sling—a support to the elongated mamma, and, when properly adjusted, affords immediate comfort to the patient. This is a very simple apparatus, and in principle different from any previously employed. Dr. O'Ferrall terms it, in contradistinction to the antero-posterior mode, circular compression of the breast. The breast is compressed in the manner so often beneficial in the limbs. The result of this plan of treatment, according to the statement of a case appended to the report, is immediate relief, with rapid diminution of the discharge, and also of the size of the breast. The latter change requires the readjustment of the plasters and bandage.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

By G. J. GUTHRIE, F.R.S., &c.

LECTURE VI.

No operation should be done on a wounded artery unless it bleed at the time when the ligature is applied; Case of musket-shot wound at the upper part of the thigh; Repeated occurrence of secondary hemorrhage arrested by pressure on the main trunk; Cure without operation; Remarks on the case; Baron Larrey's case of sword-wound on the upper and anterior part of the thigh; Severe consecutive hemorrhage; Formation of a false aneurism, Cure by bleeding, and the local application of ice; Mr. Porter's case of wound of the profunda artery with a knife; Consecutive hemorrhage; Cure without operation; Mr. Cook's case of wound of the superficial femoral artery; Operation for exposing and tying the wounded vessel, the great depth preventing the application of the ligature; Success of pressure by a piece of sponge passed down to the bottom of the wound, and the application of a ligature on the femoral artery about the middle of the thigh; Case of wound of the upper part of the thigh by a duck-shot; Repeated hemorrhage; Formation of a diffused aneurism opened in error; recurrence of hemorrhage; ligature of the femoral artery high

up; Repeated hemorrhages terminating fatally; Remarks on the case; Case of pistol-shot wound in the upper part of the thigh; Occurrence of severe hemorrhage; Formation of a false aneurism; Ligature of the external iliac artery; Death from peritonitis; Post-mortem appearances; Case of wound of the arm-pit; Repeated secondary hemorrhages; pressure on the subclavian ineffectual; The bleeding arrested by enlarging the wound, and the application of pressure directly on the bleeding aperture in the artery; Ligature of the subclavian above the clavicle; Return of the hemorrhage from the arm-pit, and subsequent hemorrhage from the wound of the operation; Ligature of the innominata; Death of the patient in ten hours; Post-mortem appearances; the axillary artery uninjured, the inferior thoracic completely cut across; Comments of the editor of the Lancet on this case; this case is a parallel one with that immediately preceding, and the editorial remarks equally applicable to both; Comments on these cases, with the requisite surgical treatment, and the operations which were performed objected to, and condemned.

There is no point more important than that to which I must now *especially* call your attention. It is that no operation should be done on a wounded artery unless it bleeds, inasmuch as hemorrhage once arrested may not be renewed, in which case any operation must be unnecessary. The first case to which I shall refer shows how firmly the principles on which wounded arteries ought to be treated, was fixed in my mind in the year 1812; and if there is one case to which I look back with more satisfaction than another, during that eventful period, it is the following.

Case 113.—John Wilson, of the 23rd regiment, was wounded at the battle of Salamanca by a musket ball, which entered immediately behind the tro chanter major, passed downwards, forwards, and inwards, and came out on the inside of the anterior part of the thigh. The ball could not have injured the femoral artery, although it might readily have divided some branch of the profunda. Several days after the receipt of the injury, I saw this man sitting at night on his bed, which was on the floor, with his leg bent and out of it, another holding a candle, and a third catching the blood which flowed from the wound, and which had half filled a large pewter basin. They seemed to think it would stop in due time, having bled once before during the afternoon. I placed a tourniquet with a thick pad as high as possible on the upper part of the thigh, and requested the officer on duty to loosen it in the course of an hour, which was done, and the bleeding did not recommence. The next day I placed the patient on the operation table, removed the coagula from both openings, and tried to bring on the bleeding by pressure and by moving the limb; it would not however bleed. As there could be no other guide to the wounded artery, which was evidently a deep-seated one, I did not like to cut down into the thigh without it, and the man was replaced in bed, and a loose precautionary tourniquet applied. At night the wound bled smartly again, and the blood was evidently arterial. It was soon arrested by pressure. The next day I placed him on the operating table again, but the artery would not bleed. This occurred a third time, and with the same result. The bleedings were however now almost immediately suppressed, whenever they took place, by the orderly who attended upon him: care having been taken to have a long thick pad always lying over the femoral artery, from and below Poupart's ligament, upon which he made pressure with his hand for a short time. The hemorrhage at last ceased without further interference, and the man recovered.

This case was to me of considerable interest, more particularly because I had not decided in my own mind what operation should be done. I did not like to place a ligature on the femoral artery above the profunda, neither was I satisfied with the idea of tying the profunda an inch below its origin. It was on this account that I was desirous that the wound should bleed at the moment of operating, as my finger introduced into it might lead to the spot whence the blood flowed, whilst I might also be guided in forming my opinion, by the manner in, and place at which pressure caused it to cease I might have tied the profunda, but I certainly would not have tied the superficial femoral artery. My intention was however to ascertain if possible whether the wounded artery would be more easily got at by a transverse incision on the fore or back part of the thigh, and to proceed accordingly. In a similar case I should introduce my finger into the wound, and enlarge it transversely, continuing the incision until the opening was sufficiently large to see to the bottom of the wound or the bleeding part. It is necessary to be attentive to the course of the great vessels and nerves, but not to the safety of muscular fibres, the division of which leads to no permanent injury. I am aware, that as pressure on the main trunk led to the ultimate suppression of the hemorrhage, it may be said, that a ligature placed high up on the femoral artery would not only have done the same, but would have relieved the man from the anxiety necessarily dependent on the momentary fear of a recurrence of the hemorrhage. There are two objections to this method of proceeding: the likelihood of mortification taking place, which I have sufficiently shown to be in similar cases a probable occurrence; and the possibility of the hemorrhage being renewed through the anastomosing branches. The temporary suspension of the circulation by pressure does little or no harm, more particularly where the pad used is so thick as to cause it to fall principally on the artery, and only in a slight degree on the surrounding parts, which by a little attention may be readily accomplished. I have succeeded in many instances of hemorrhage from less important places, by proceeding in this manner; but I have selected this particular case as an example to ground the proper line of practice upon, because it was of more importance than most of those which usually fall under the observation of the surgeon. It is not good practice to cut down upon an artery on the first occurrence of hemorrhage, unless it be so severe or so well marked as leave no doubt of its being from the main trunk of the vessel itself; nor is it then advisable to do so except the artery continue to bleed; for many a hemorrhage, supposed to have taken place from the main trunk of an artery, has been permanently stopped by a moderately continued pressure exercised in the course of the vessel, and sometimes on the bleeding part itself, particularly if the blood be of a dark colour, indicating that it comes from the lower end of the vessel.

Remarks.—This case was pri[illegible] with the preceding annotations on it, in 18[illegible] in my work on the Diseases and Injuries of Arteries. It shows that the practice I now inculcate is not that of this day, and I am particularly desirous that this fact should not be overlooked. It is my apology and my authority for condemning an opposite practice in my cotemporaries.

A painter could not have had a better subject for a picture illustrative of the miseries which follow a great battle, than some of the hospitals at Salamanca at one time presented. Conceive this poor man, late at night, in the midst of others, some more seriously injured than himself, calmly watching his blood—his life flowing away without hope of relief, one man holding a lighted candle in his hand, to look at it, and another a pewter wash-hand basin to prevent its running over the floor, until life should be extinct. The unfortunate wretch next him with a broken thigh; the ends lying nearly at right angles, for want of a proper splint to keep them straight, is praying for amputation or for death. The miserable being on the other side has lost his thigh; it has been amputated. The stump is shaking with spasms; it has shifted off the wisp of straw which supported it. He is holding it with both hands in an agony of despair. You may think I am exaggerating; I assure you I am not, and I refrain at the present moment from saying much more, which however I shall tell you at some future day, that I may not attract your attention from our all-important subject.

Case 113.—D. Hyppolite was wounded on the 9th of April by the point of a sword on the superior external, and a little on the anterior part of the right thigh, about three inches and a-half below the anterior inferior spine of the ilium, which penetrated to the depth of two inches and a-half in a horizontal direction from without inwards, and a little backwards, so as to injure, as was supposed, the external and back part of the femoral artery. The wound bled profusely by jets; until the man fainted, when it ceased, but was renewed next morning, when it was arrested with the greatest difficulty. On the 11th, when admitted into the hospital of Gros Caillou under Baron Larrey, there was a pulsating swelling in the right groin of a slightly blue colour, the size of a man's fist, extending from the anterior inferior spine of the ilium to the pubes. He complained of a feeling of cold in the leg and foot of the affected side, and of great heat in the swelling. The pulse was hard, full, and vibrating. He was bled twice in the first twenty-four hours, had iced barley-water to drink, and an antispasmodic nitrated emulsion at night. The leg was bent on the thigh, and the thigh on the pelvis, the patient being laid on his back in bed. A cold emollient poultice was laid on the swelling, and the leg was wrapped up in hot flannel. These symptoms subsided by degrees, and after the third day pounded ice was added to the cataplasm. Under these means the inflammatory symptoms gradually yielded, the swelling diminished in size, and the pulsations became less strong. Ice contained in a bladder was substituted for the iced poultice, and was frequently renewed, and continued without interruption. The circulation through the artery below, which had been at first arrested, was gradually restored by the collateral circulation, and the man recovered.

Remarks.—This case should be always in the recollection of surgeons, offering an example to be followed in all similar instances. Case 62, also by Baron Larrey, and Case 63, by Delpech, are instances so honourable to these gentlemen on the same point that I cannot refrain from gratifying my own feelings by offering this homage, as it is expressed in France, to their memories.

Case 114, by Mr. Porter of Dublin.—A boy attempting some improper liberties with a female servant was struck by her with a knife on the superior part of the thigh, and the profunda artery was wounded. The bleeding was immediately controlled, but after nine days burst out again, welling forth without impetus, and coming from the inferior section of the artery. Pressure was applied, but ineffectually, for in a little time he bled again, and after several recurrences, it was proposed to tie the external iliac artery. On being placed on the table for that purpose, some one remarked that he had not bled since the previous evening. He was therefore replaced in bed, and never bled afterwards.

Remarks.—If the external iliac artery had been tied, the cure would have been attributed to it, and if mortification or peritonitis had supervened, it would have been said that they were unavoidable evils, and instead of applauding Mr. Porter's just decision, the invaluable example he set, and the sound knowledge of the proper treatment of wounded arteries he exhibited, I must have passed his case by without a favourable remark. If, unfortunately for the lad, the external iliac had been tied, and the bleding had recurred, Mr. Porter must, I presume, have tied the common iliac, and if that had not succeeded, the aorta, or he must have descended to the more simple operation of cutting down upon and tying the bleeding vessel, and thereby saving the patient's life, if not too late.

Case 115, by Mr. Cock of Guy's Hospital.—H. P., aged twenty-six, a butcher, healthy, and of temperate habits, was admitted into Guy's Hospital under the care of Mr. Cock, on the 19th of October, 1844 (see 26th vol. of *Medical Gazette*). In dividing a calf's head his knife slipped, and entered his thigh on the inner side, near the junction of the middle and lower third, and penetrated to the extent of some inches. He lost a large quantity of blood, and became faint. Pressure, and the prompt application of a tourniquet, effectually prevented further hemorrhage. An hour after the accident, he was in a state of complete collapse, but sensible and collected. Below the tourniquet the thigh was distended with effused blood, and he complained of great pain and numbness of the whole extremity. On relaxing the tourniquet arterial blood flowed freely from the wound, which was about an inch in length, and extended transversely across the situation of the sartorius muscle, exposing the fascia beneath. The tourniquet placed over the femoral

artery below the origin of the profunda, completely commanded the bleeding. The superficial femoral had sustained the injury, and it was determined to follow the track of the wound, if possible to the artery, and place a ligature above and below the opening in the vessel where injured The tourniquet having been removed, and the artery commanded by pressure at the groin, a longitudinal incision was made in the direction of the femoral artery. The sartorius was found to be divided across, and retracted upwards to a considerable extent, the extremity presenting a large, rounded, bulbous appearance. On cutting through the fascia a large quantity of extravasated blood was brought into view, and no sooner was this disturbed and partially removed than a copious gush of dark coloured blood took place, and continued to flow freely, as was supposed, from a large vein. Mr. Cock then discovered that the wound had a direction downwards, to the extent of at least four inches into the popliteal space, and it appeared most probable that the vessels, both artery and vein were cut, as they emerged from the lower opening of the canal of the adductor magnus. The great depth of the wound, and the free venous hemorrhage, precluded the possibility of tying the artery at the seat of injury. The bleeding was first stopped by introducing a piece of sponge down to the bottom of the wound, and by exposing and placing a ligature on the femoral artery about the middle of the thigh. The bleeding, both arterial and venous, was then effectually arrested; the edges of the wound was brought together by suture and plaster, except at the lower part, where the sponge had been introduced. The limb was placed in an easy position, the leg and foot covered with flannel, and he took thirty drops of tinct. opii, brandy and water, &c., and passed a tolerable night. On the fourth day after the accident suppuration of a healthy character commenced; the sponge was subsequently removed, the edges of the wound were approximated, and supported by plaster, and he was ordered quinine with morphia at night, with a generous diet. The suppuration was extensive. The ligature came away on the fourteenth day; the cure was not however completed until the end of March.

Remarks.—There could be no doubt of the propriety of placing a ligature on the femoral artery immediately above where it was injured. If the femoral artery when exposed had been followed downwards, it is possible the dissection would have shown the wound in the artery, and that the venous blood flowed from the lower opening in it. The sponge thrust into the lower part of the wound acted as a compress, and as the collateral circulation is not established with much impulse in the first instance, the operation succeeded, and in a manner highly creditable to Mr. Cock. If the sponge had not been sufficient to prevent a recurrence of the hemorrhage, Mr. Cock would have been obliged to follow the artery, if necessary, into the popliteal space. This might have been done by extending the incision in its length, or by making the finger protrude below over the artery, and then cutting down upon it. A Pouteau's or curved trocar and canula may be used in such cases with advantage as a director.

CASE 116.—A young gentleman, aged twelve, accompanying his brothers shooting in December, 1844, was struck in the upper part of the left thigh by a duck-shot, which entered about three inches below Poupart's ligament, and a little to the inner side of the femoral artery. He bled until he fainted, and was taken home. There was no return of the bleeding for three days, during which time the limb was exceedingly painful, and soon began to enlarge. After this time occasional and considerable bleedings took place, the limb still continuing to enlarge. Fomentations and poultices were applied; irritative fever set in, and the pain was intense. At the end of a fortnight the small hole made by the shot appeared to be healed over by a thin skin of a blue colour, which tint extended for some distance. The limb was enormously swollen, with a feeling of distension, which induced the surgeon to puncture the most prominent part with a lancet. After some clots of blood had been removed, an alarming arterial hemorrhage took place. The femoral artery was now tied high up, below Poupart's ligament. The bleeding was in some measure restrained, but not suppressed, and after a short time returned at intervals with augmented violence, until death ensued, three weeks after the accident.

Remarks.—If an incision had been made into the thigh in the course of the wound when the bleeding returned on the third day, and both ends of the wounded artery had been tied, the boy would doubtlessly have recovered. The ligature placed on the femoral artery above the wound in it did restrain for a short time the flow of blood, but could not prevent its flowing from perhaps both ends of the vessel, until it destroyed the patient. A ligature on the external iliac would only have caused it to be deferred for a day or two, until the collateral branches had enlarged, or else he would have died of mortification. The case was a bad one from the moment the thigh began to be so greatly injected with blood, but the decision shown by Mr. Keate in Case 13, and by Mr. Norman in Case 96, might have saved his life, even almost unto the last. In this case it was exceedingly possible that the profunda was injured, and not the femoral artery, the tying of which or of the external iliac could not have done good for a permanency, as the bleeding would doubtlessly have returned on the establishment of the collateral circulation.

This really formidable case shows most distinctly the necessity for always observing the rule of tying the wounded artery at the part injured, in order that the mistake may not be made of placing a ligature on the wrong artery—the constriction of which may cost the patient his life, whilst it may not prevent a return of the bleeding. It also shows that no loss of blood from a diffused aneurism can equal the danger which must be encountered, and the mistakes which may be made, by not laying it open, and seeing the hole in the artery, or its divided extremities. These cases may be considered together with the greatest advantage, as indicating the principle of surgery to be pursued in all similar instances.

CASE 118.—A short man, fat of his age, was wounded in the upper part of the right thigh, a little above and in front of the great trochanter, the wound being continued across the thigh, its internal opening being about the middle of the fold of the left or opposite groin. He lost a good deal of blood at the time, the issue of which ceased on his fainting. Ten days after the accident his countenance was blanched, his pulse rather quick and feeble. On examining the wounds, that on the right hip (the opening of entrance) was circular, filled with a dry, depressed slough, and there was a narrow, faint blush of redness round its margin. In the left groin the opening of exit was marked by a jagged slit, already partly closed by a thin cicatrix. There was extensive mottled purple discoloration (ecchymosis) of the skin in both groins, and over the pubes, scrotum, and upper part of the right thigh. In the right groin was found a large, oval, visibly pulsating tumor, its long diameter extending transversely from about an inch and a-half on the inner side of the anterior superior spinous process of the ilium to about opposite the linea alba, and its lower margin projecting slightly over Poupart's ligament into the upper and inner part of the thigh. On handling this tumor, it appeared elastic, but firm, very slightly tender, and not capable of any perceptible diminution in bulk by gradual and continued pressure. The pulsation was distinct at all parts of the swelling, and was equally evident whether the fingers were pressed directly backwards, or whether they were placed at its upper and lower margins, and pressed towards the base of the tumor, in a direction transversely to its long axis, the parts being for the time relaxed. The femoral artery was slightly covered by a swelling, and the pulsations of that vessel were with some difficulty distinguished in the upper third of the thigh, below the margin of the tumor. This appeared to depend partly on the natural obesity of the patient, and partly on a considerable degree of general swelling of this thigh. Pressure on the femoral artery or over the abdominal aorta did not arrest the pulsation in the tumor, and in the former situation was attended with severe pain. Under these circumstances it was deemed advisable to apply a ligature on the external iliac artery, and give the patient a chance of the occurrence of coagulation in the tumour, and closure of the wounded vessel, before the free re-establishment of the circulation through the femoral artery. In the present case, it was supposed that mortification of the limb was all the less likely to occur from the circumstance that the greater part of the effusion appeared in front of the abdominal parietes, and therefore exercised less pressure on the femoral vein than if further extension into the thigh had taken place. The danger of peritonitis was by this proposal made a new element in the calculation; but it was estimated that the chances of this and mortification of the limb taken together were less unfavorable than the chances of immediate and secondary hemorrhage attaching to the operation of tying the artery at the spot injured. The operation being completed, the right foot, leg, and thigh were enveloped in lamb's-wool and flannel, and the limb elevated on an inclined plane of pillows, so as to favour the return of blood as much as possible, and prevent venous congestion. The day on which the operation was performed was passed in considerable pain, the patient being restless, and complaining of a sense of burning in the limb. An anodyne, however, secured him a tolerably good night's rest. The day after the limb was found altogether diminished in bulk, and its temperature equal to that of the healthy limb; no return of pulsation had taken place in the tumor. The same evening some tenderness and tension of the abdomen came on, though the bowels had been kept in a regular state by occasional small doses of castor-oil. In the morning of the second day, pain in the belly, with increased tension, hurried breathing, short dry cough, and tenderness over the lower part of the abdomen, were observed. Pulse quicker and small Leeches were applied, and three grain doses of calomel, with a little Dover's powder, ordered every three hours. The symptoms however became rapidly worse; the patient complained of severe pain in the right leg, and a sensation of great heat over the whole body, although the actual temperature was rapidly falling below the natural standard. The right leg also became cold sooner than the left. At seven, p. m., he became more easy, and expressed an opinion that he should "do well;" but in little more than half an hour he expired.

Examination after Death.—Swelling and ecchymosis of the right thigh, particularly at the upper part, and in the right iliac region; also swelling and ecchymosis of the scrotum, chiefly in the right side, with general tumefaction of the abdominal parietes below the umbilicus. A wound into which the little finger could be passed was on the upper and outer aspect of the right thigh, about three inches below the crest of the ilium, and about an inch nearer the mesial line than the great trochanter, and on the left side another smaller wound situated about the external aperture of the left spermatic canal. The first-mentioned wound was open—the lips of the latter were partially adherent. The course of the wound was traced from the outside through a dense layer of fat about two inches in thickness (on an average). It had divided one of the superficial branches of the femoral artery, about half an inch below Poupart's ligament, and about an inch from the main body of the femoral artery, which had caused a false aneurism. The sac contained about three ounces of blood. Blood was also effused into the cellular structure of the scrotum, and downwards beneath the sartorius muscle. The wound passed through the cellular tissue, across the pubes, and emerged about the situation of the external spermatic ring, without having divided the cord on either side, and being quite superficial to the bladder. No other artery appeared to have been wounded. When the parietes of the abdomen were reflected, a considerable quantity of sero-purulent fluid was found in the abdominal cavity; and on different parts of the large and small intestines, patches of acute inflammation were observed, particularly on the ascending arch of the colon. The peritoneum adjoining the wound of the operation was inflamed, and approaching to gangrene; it had not been injured by the knife during the operation. The intestines were unusually large, and distended with flatus. The other abdominal viscera were healthy, but loaded to an extraordinary degree with fat. The ligature had been properly applied to the iliac artery; the vein was not injured; the surface of the wound and the

cellular tissue in the neighbourhood of the artery were sloughy. There was some enlargement of the right limb, but apparently no mortification. The femoral artery was pervious; the course of the wound was through a bed of fat, fourteen inches in length, and three inches in depth, over the pubes, and no muscular substance was injured; the blood found in the aneurismal sac was firmly coagulated, and there was no mark of recent oozing from the injured artery.

CASE 118.—N. Cormier, a soldier, with the army at Oran, in Algeria, received a wound in the hollow of the arm-pit from the point of a scissors mounted on the end of a stick, the flow of blood from which was arrested by some handkerchiefs bound tight upon it. Four days afterwards a small bleeding took place, which was followed by three others during the subsequent eight days, all of which stopped spontaneously on removing the dressing. On the twelfth day he complained of great pain, which was attributed to the dressing not having been changed for four days; on removing them a jet of arterial blood followed, as large as a quill. Pressure was made on the subclavian artery, but it did not seem to be effectual, for as the blood was prevented from escaping by the external wound, the arm pit became visibly more and more distended; the wound was therefore enlarged, when an assistant placed his finger on the bleeding hole in the artery and arrested the bleeding. The French surgeon then tied the subclavian artery above the clavicle, and prevented an immediate return of the hemorrhage.

On the sixth day after this operation the patient rose from his bed and walked across a yard, which gave rise to *bleeding from the arm-pit.* This was arrested by cold applications. During the night and the following day he lost more blood. Three days afterwards, or the ninth from the operation, the ligature on the subclavian artery was found loose in the wound, and the dressing was saturated with blood, the discharge being fetid. This wound bled three times during the evening, and at twelve at night the surgeon placed a ligature on the arteria innominata (*le tronc brachio-cephalique*).

The patient died ten hours after the completion of this operation. On examination after death the ligatures were found to have been properly applied, but, contrary to what was supposed, the axillary artery was uninjured; the blood came from one of its branches, the inferior thoracic, which was completely cut across about a centimetre or thirty-nine hundredths of an inch, or *five* lines from its origin from the axillary artery.—*From the Archives Générales, p.* 101, 1812, *Annales de Chirurgie,* page 19.

The editor of the Lancet comments as follows on this case in the volume for 1841-42, page 230:—

"Our object in noticing the case is, not only to furnish our readers with one of the most striking instances of the folly of applying to wounded arteries the same operation as for aneurism, but also to make a few practical remarks, which we believe will be found in none of our surgical works. Where a large artery, whether it be the principal artery of a limb, or one of its branches, is wounded, it is an established rule to tie the artery above and below the wound; two ligatures are therefore required, but in some cases, the above for example, instead of two, three ligatures would be requisite. A butcher (says M. Laugier, in his *Bulletin Chirurgicale*) cut his wrist deeply; hemorrhage ensued; compression of the brachial artery arrested it; but circumscribed pressure on the radial above and below the wound had no effect. The wound was enlarged, and the blood was perceived escaping from an opening in the ulnar side of the radial. Two ligatures were applied, one above, the other below the opening, the hemorrhage however continued. It was thought for a moment that the interosseus might have been wounded, the knife having passed deeply from without inwards, but on examining carefully, the superficialis volæ was seen bleeding; it had been divided immediately at its origin, on a level with the radial. A ligature was passed around it, and the hemorrhage ceased. Let us now examine what would have occurred in case No. 118 if, as he should have done, the surgeon had enlarged the wound, and attempted to tie both ends of the bleeding artery. The inferior thoracic had been divided close to its origin from the axillary, leaving scarcely sufficient length for the ligature of its upper orifice; it would therefore have been requisite to have placed a ligature round the axillary, above and below the origin of the thoracic, and, in addition, a third ligature round the inferior orifice of the divided thoracic, from the numerous anastomoses between it, the internal mammary, an superior intercostal arteries. It may be objected that the third ligature could be advantageously replaced by compression. This might be true in M Laugier's case, where pressure on the superficialis volæ, as it passes over the carpus, could be easily effected; but it would have been wholly inapplicable to case No. 118 from the depth of the axilla, and from the impossibility of applying compression methodically. We have thrown out these few remarks, as similar cases may occur, and prove extremely troublesome and puzzling."

I have placed these two cases in juxta-position because no two can be found more exactly resembling each other, as far as regards the defective nature of the principles on which they were treated. Both were supposed to be cases in which the main trunk of a large artery was wounded. In both the main trunk was tied at a distance from the part wounded; and in both the patients died of evils foreign to the original injury. On examination after death it was found that a great mistake had been made in both—that in neither had the main trunk been injured. The criticism of the editor of the Lancet on the French case, No. 119, is honest, true, and just, although too severe. It is as applicable to 118 as to 119, to one operation as to the other, and must be applied to both, unless there is one manner of criticising French surgery, and another for English surgery. The French surgeons committed, in my opinion, an error in principle only. The impromptu manner in which they first tied the subclavian artery, and afterwards the arteria innominata, is above all praise. They showed an admirable knowledge of anatomy combined with great surgical dexterity. The English surgeons showed equal anatomical and surgical skill and ability, and are no less deserving of the highest commendation. They both, however, deviated from those principles which are so well laid down by the editor of the Lancet—principles which I have advocated for so many years, and which I am now endeavouring to enforce—they all failed in consequence, and lost their patients through errors in principle, but not in practical surgery.

This they deny, and on the contrary affirm, that the principles and the practice pursued in these cases are not only the correct principles and practice, but that they ought to be followed in similar instances. Some other surgeons of character and estimation have supported their views, and others, of even perhaps greater reputation in England, Ireland France, and America, have lately concurred in the expression of the same sentiments. The gentlemen concerned in cases 118 and 119, are not only acquitted by them of any error, but they are authorised, as far as their approval goes, to do the same thing again; and there can be little doubt if other cases of the kind were to occur, that there are surgeons to be found who would adopt a similar practice, to be followed in all probability by the same fatal results. It is not, then, a personal question founded on envy, malice, and all uncharitableness, which is to be discussed, as it has been hastily said to be; but a great principle in surgery, implicating life to the utmost extent. It is a principle on which there cannot be a compromise—the Hunterian theorists are right or wrong. They must overcome the observations, the practice and the principles formed and established during the late war in Portugal, Spain, France, and the Netherlands; or they must yield even if they will not acknowledge their errors. That they are discomfited is proved by almost every case I have adduced, and if anything were wanting to render their defeat more complete it is to be found in cases 118 and 119. They are like beacons on each side of the Channel, standing out in all the refulgence of their light, to warn future surgeons of their respective countries from the paths of error and of death.

The French surgeons were compelled to do something or let their patient bleed to death. They proceeded therefore to do the right operation of arresting the flow of blood through the artery, by placing a ligature upon it. They applied it however according to the Hunterian theory, on the wrong artery and in the wrong place, and lost their patient, which they would not have done in all probability if they had tied up the hole in the artery which really was wounded, instead of the trunk of one that was uninjured; but from which it sprung at the distance of five-twelfths of an inch, a distance sufficient to have enabled the surgeon to have applied a ligature with safety and success. The English surgeons tied the main trunk at a distance instead of the wounded branch, committing the additional error of disregarding that essential principle of surgery which declares that an operation is not to be done on a wounded artery unless it bleeds. The examination after death proves that the small artery which had been injured had ceased to bleed, that it was not likely to bleed again, that the quantity of blood effused did not exceed three ounces, and that this was even firmly coagulated. If the bleeding had been renewed, and the blood had escaped through the opening in the outer part of the thigh in such quantity as to render some operative assistance advisable, or if the blood could not find issue at the moment through the opening, in consequence of some part of the track of the injury having closed, and the tumour had increased, and *was manifestly increasing*, to a size so considerable as to be capable of containing from eight to twelve or sixteen ounces of blood, an incision should in either case have been made through the wall of the tumour, and the wounded vessel exposed and secured, whatever it might have been; by which proceeding all possibility of mistaking the wounded artery must and would have been avoided.

According to the principles I maintain to be correct, no operation whatever should have been done in this case, and none would have been required; or if one should have become necessary from any accidental or incidental cause, it need have been nothing more than a simple incision for the evacuation of the contents of the swelling and for the ligature of the small vessel injured. According to the principles maintained by my opponents, they could do neither more nor less than they did: they lost their patient in consequence, and they will generally do so when they act on similar principles in similar occasions. It is for the profession to decide whether principles so deadly in their application shall be any longer permitted.

Three supporting and exculpatory hypotheses have been brought forward and for the first time in aid of the Hunterian theory, all of which I have shown and proved to be worthless:—1st. The supposed insecurity of a ligature placed on the upper part of the femoral artery when in a sound state, has no foundation, as several of the cases I have adduced distinctly show. 2nd. The fear of tying a branch of an artery an inch from its origin lest it should give way from this cause, is thoroughly disproved by the experience of every man who has amputated arms at or near the shoulder-joint. In my book on the Diseases and Injuries of Arteries I have said, page 376, "I have seen the epigastric artery divided in the operation of placing a ligature on the external iliac artery and two ligatures placed upon it without any inconvenience occurring; and I have reason to know that this artery is made a greater bugbear of, than there is any occasion for in all operations on those parts. If the surgeon has unluckily divided it, either in this or in any other operation, all that he has to do is to enlarge the incision, and to tie both the divided ends; and I have no hesitation in saying it will not be of any consequence, either in this operation or in one for hernia." I was not aware when I wrote that passage, some sixteen years ago, that there would be a day when theory would attempt to refute what ample experience had fully established. As to the 3rd, or the fear that the loss of blood consequent upon the opening of an aneurismal swelling may destroy the patient, I can only say, that as far as my knowledge extends no such thing has ever occurred, and as it never could have occurred in the hands of any of the very able French or English surgeons who were concerned in the two cases alluded to, I shall not take the trouble to refute the possibility of an occurrence which I am satisfied never could have taken place.

The great principles of surgery to be observed in

cases of wounded arteries, especially such as the axillary and the femoral, and which ought never to be absent from the mind of the surgeon, are two in number :—

1. That no operation ought to be performed on a wounded artery unless it bleeds.

2. That no operation is to be done for a wounded artery in the first instance but at the spot injured, unless such operation appears to be impracticable.

When Mr. Hunter impugned the principle on which his predecessors and his contemporaries acted in cases of diseased arteries admitting of surgical operation, he neither doubted their skill, their ability, nor their anatomical knowledge; he merely said to them, the principle on which you proceed is bad; it causes you to do your operation in the wrong place. Change your principle, do your operations with the same knowledge and the same dexterity as at present, but do them in a different place. The difference which existed between Mr. Hunter and his contemporaries is exactly the difference which exists at the present moment between me on one side, and my opposing cotemporaries who think and act differently on the other. It has nothing to do whatever with the professional character, ability, or dexterity of any of them; it is simply a question of principle, and which party is right or which is wrong the profession must, I again repeat, decide. In the law, Chancellor No. 2 overturns the decisions of Chancellor No. 1, he in his turn is overruled by Chancellor No. 3, who, by another reverse of the wheel of fortune, finds himself in the condition of having his decrees overthrown in succession by perhaps both Nos. 1 and 2. These chancellors however always remain good friends, and the public have not a worse opinion of them than they had before they disagreed, not with each other, but with the law of the respective cases submitted for their decision. It ought not to be otherwise in surgery than in law. It is in man to err.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XIII.

PORRIGO.

According to Willan, and others.

GENERA.	SPECIES.
Porrigo.	P. Larvialis Furfurans Lupinosa Scutulata Decalvans Favosa

As proposed by Startin.

GENERA AND SPECIES.	DIVISIONS.	FORMS.
PORRIGO.		
P. Simplex vel favosa Capillo-crustata Ulcerosa	Localis. Generalis.	Sparsa Figurata vel Scutulata Inveterata

GENTLEMEN,—There is perhaps no cutaneous malady which has been illustrated by so many monographs as the common, but imperfectly understood, affection termed porrigo. The tinea capitis, scabies capitis, scalled head, or ringworm is considered a contagious disease; the contagion, according to the labours of some German anatomists, particularly Dr. Gruby, depending upon vegetable growths within the hair follicles, which, escaping to the surface, form a cup-shaped crust, that is said to consist of 'innumerable cryptogamic plants,' producing abundance of sporules, which, conveyed to the sound skin, constitute the medium of contagion of the disease. I am not prepared entirely to acquiesce in this doctrine, but hope ere these lectures are concluded to be able to add my mite to the information already collected on the subject. When speaking of impetigo, I endeavoured to point out the distinction between that disease and porrigo, and the contagion of the latter was held to be the most distinctive characteristic, whilst the want of any admixture of morbid cuticular scales, the cellular shape of the crusts, and the presence of the peculiar vegetable growths alluded to, afford additional distinctions. The form of the pustules is also that termed favosa, by which is to be understood, that they are small rounded, and flattened, pale-yellow pimples, fitted with a peculiar fluid somewhat like honey, which concretes into cellular or cup-shaped crusts, each crust or pustule being surrounded with comparatively little inflammation.

Porrigo may be defined to be a form of contagious cutaneous disease, occupying chiefly the hair follicles, and characterised by a simultaneous, or successive eruption of pale, straw-coloured favous pustules, concreting into yellowish or brown cellular or cup-shaped crusts, which the microscope determines to consist of pus globules, and a peculiar vegetable cryptogamous growth, by the seeds or sporules of which the contagion is propagated. When these crusts are removed, in a chronic form of the complaint, a red, granular ulcer is exposed, presenting an irregular surface and somewhat circular form, which quickly becomes covered with a new incrustation, and this disease is most commonly found on the head and face, but any part of the body may be affected.

It will be perceived that this definition will not comprehend many of the forms of skin disease, which have been classified by Willan and his followers under the head of porrigo; but the fact is, this excellent author comprehended nearly every disease of the scalp under that appellation, whereas the porrigo furfurans, the P. scutulata, the P. larvialis, and the P. decalvans, belong to other affections of the skin, or, at any rate, the definition of porrigo must be completely altered if they are to be included under its characteristics, and psoriasis, pityriasis, eczema, impetigo, and lichen would then be excluded from infesting the scalp, as those varieties of porrigo must be referred to one or other of these diseases, with the exception of the last, or P. decalvans, which must be classed under maladies attended with baldness, arising from diseases of the hair follicles or bulbs, which, under the term alopecia, I shall defer for future consideration.

Porrigo may attack any age or part of the body, but it is most incident to youth; from its contagious nature the rich and the poor are equally liable to be its victims, whilst, as might be supposed from its origin, it is attended by no constitutional disturbance, at least in its earlier stages, but in habits of scrofulous or syphilitic diathesis, it may often be the exciting cause of constitutional derangements. I propose to consider porrigo as divided into three forms, which are called P. simplex or favosa, P. capillo-crustata, and P. ulcerosa, and the disease may be local or general, and manifest itself in the varieties termed sparsa, figurata, and inveterata. The first species, porrigo simplex, is the P. favosa of Willan; it consists in a scattered eruption of large, flattened, yellow pustules, which break on the slightest force, and give vent to a semifluid matter which rapidly concretes into loose cellular scabs, of a greenish yellow colour, surrounded with a slight blush of inflammation, as shown on the models, in one of which the disease is in the scattered, and in the other it is shown in the figured or grouped variety (the P. scutulata of Willan). This complaint is most common in children, less so in adults, and very rare in advanced age; more or less irritation always accompanies the affection, and the constant pricking is apt to irritate the absorbents of the cutis, and occasion swelling and inflammation of the superficial lymphatic glands, which sometimes ends in suppuration. You will perceive the appearance the disease presents on the face, and also on the scalp, when the hair becomes matted together and forms an appropriate nidus for pediculi, which seem very constantly to rejoice in such quarters; it is supposed that the very faint and peculiar odour arising from this and other species of porrigo (which is more like that of mice than anything else, at least to my sense of smell), gave the name of porrigo to the complaint, from porrum, a leek or garlick, but this I believe to be fanciful, and rather think the Latin word porrigo, to extend or spread about, will furnish a more reasonable derivation. It is not uncommon to see whole families suffering from porrigo simplex or favosa, and I have known nearly every individual in a school of young children thus affected; the irritation is sometimes so great in these young subjects, that a feverish state of the system may be provoked—this is particularly the case in scrofulous habits, and in ill-fed and badly clothed individuals.

The porrigo capillo-crustata is the porrigo lupinosa of Willan; it is beautifully exemplified by the cast to which I direct your attention, which you will perceive is characterised by the formation of dry circular scabs, of a dirty yellow colour, set deeply in the skin, with elevated edges, and a central cup-like depression, containing, as remarked by Dr. Gruby and others, the seeds of contagion in the form of sporules, produced from minute microscopic vegetation; this disease I have in several instances seen in parents and their offspring, not, however, as stated, from "a contagious," but a congenital cause; indeed were I to state my own conviction as regards this species of porrigo, I should most distinctly disavow its contagiousness under any circumstances that have fallen beneath my notice. These crusts, you will observe, seldom exceed the size of the end of the finger, and they are irregularly circular rather than round; their first appearance is manifested by small clusters of favi, which soon commence the scabbing process, and in the advanced stages of the disease, an ulcer which has destroyed the roots of the hair, and produced an incurable baldness, is seated below the scab. Any part of the body may be attacked with this species of porrigo, which, when advanced to its chronic stage, forms the next species; that I have called P. ulcerosa, in its nature not materially differing from the malady last described, save that ulcers filled with red uneven granulations, discharging a thick glutinous pus, are intermingled with the cup-shaped crusts. I may mention, as regards diseases of the scalp, that the porrigo scutulata of Willan is, in fact, impetigo figurata affecting that part of the body, as also for the most part is P. larvialis, an impetigo scabida, affecting the face, though it may also be eczema crustatum, whilst P. furfurans may be eczema furfurosum, or pityriasis, alphos or rubra; hence I must refer to what I have stated when speaking of these diseases for the treatment and cure of these last mentioned so called porriginous affections, yet the same rules may commonly guide you in the cure of all these maladies, whether belonging to the genus porrigo or any other, in fact, they may be said to be the connecting links in the chain, and consequently require no special treatment, but rather an adoption of general therapeutics, which may be equally applicable to both disorders. The first procedure I would dwell upon as most necessary to success (I speak of course from my own experience), is to avoid all unnecessary irritation; do not use soap, or any cold lotions, or poultices, or narcotics, that by their absorption may occasion fatal effects, as tobacco, &c. Do not shave the head, but use scissors, cutting the hair as close as possible, and use all applications without force or friction, following the grain of the hair, and extract with the forceps those hairs only which are loose, and can be removed without pain. The directions I am in the habit of giving are as follows:—Soften the crusts if necessary by applying flannel wrung out of water as steaming hot as possible, without scalding or injury to the head, till the hair can be cut short with scissors, so that the root of every hair may be visible without touching the parts; wash the head with half of the yolk of a fresh egg and tepid water; dry it with a soft cloth, and anoint with an ointment adapted to the case, which in porrigo should be a sulphureous application; in impetigo the iodides of mercury or of sulphur; in pityriasis calomel, white or red precipitate of mercury; and in eczema the bisulphuret of mercury, and sometimes the black oxide of manganese; all these ingredients may be combined with creosote, with camphor, &c., as well as variously intermingled, bearing in mind that the proportions of each article must not exceed ℈j to ʒj of lard, which is better than any oleaginous substance of which I have made trial. Of course the internal treatment must correspond to the nature of the particular affection, its stage, and the constitutional symptoms manifested. It will also be advantageous that the patient wear a light linen or silk cap, which is by no means to be rendered impervious to perspira-

tion, but to be of a kind that can be washed daily the lining of hats, bonnets, &c., must also be frequently cleansed and renewed. If these recommendations be attended to, I can assure you from my own experience, that a complaint which ordinarily lasts for years may be subdued in as many weeks or months; but as cases may best illustrate this position, I will cite two or three which have occurred during the last month or two—of course confining myself to those strictly belonging to porrigo; and for other affections of the scalp erroneously classed under this head, I must beg you will recollect what has been advanced respecting the internal and external treatment of the different maladies of which they are local manifestations.

Mary Elizabeth Ewins, aged sixteen, residing in Cheapside, was admitted on the 7th of November last with porrigo favosa of five years' standing, which extended over the whole head, and presented an appearance accurately represented by the plate from Willan's posthumous work on porrigo, which I send round. This patient was a tall, delicate, and chlorotic looking girl, with a pale complexion and light brown hair; she menstruated regularly every three weeks instead of the usual period, to which her mother attributed her weakness and pallid countenance: she often had fainting fits and sickness. She had made constant trials to obtain a cure of her troublesome malady, and came to me wearing a medicated poultice. I gave the directions I have before detailed as regards soothing, cleansing, and anointing, and directed the subsequent application of an ointment containing the black sulphuret of mercury, the ioduret of sulphur and creosote, in slender proportions; whilst the iodide of iron, in two grain doses, was taken three times a-day, in a draught of infusion of quassia. On the 28th of November, two weeks after her admission, a steady perseverance in the means recommended, had nearly restored the scalp to its healthy state; a few favous pustules, however, were every morning discovered, which disappeared in the course of the day by the use of the ointment; her health was also better. I saw this young woman yesterday, with scarcely a trace of her former malady, and with much constitutional improvement, though she had not lost her fainting fits and hysterical symptoms, and she also complained of headache.

As her bowels were constipated, I trust the active aloetic purgatives I ordered her will remove that symptom, and she will be well. I find a prolapsus uteri will require my future attention.

The next case, that of George Copus, aged ten, of Pagent-square, Old Bailey, was admitted on the 19th of September last, with porrigo lupinosa of Willan, in a form exactly represented by the cast No. 5439, taken from a child residing at Gravesend. George Copus had suffered for six years from his malady, which I call porrigo capillo-crustata; he was of strumous diathesis, and the lymphatic system in the vicinity of his disease was affected; the usual rules regarding washing and anointing were given, and an ointment containing the black sulphuret of mercury and white precipitate was afterwards used, and he took iodide of potassium and opium internally—a plan of treatment which was persevered in till the middle of last month, with little or no variation save in regulation of the washings and doses of iodine, when he was discharged cured November the 7th, with directions to appear again in the event of any return of the disease. The last variety of porrigo, P. ulcerosa, is in fact the same as that just detailed, with the scabs removed, and the ulcerated surface beneath them exposed: it was well illustrated by a patient who applied yesterday, by the name of Charles Banfield, aged thirty-four, of Margaret-street, Hackney-fields, having suffered one year from his disease, which was what I have called P. ulcerosa. The left side of his head, the cheek, and thigh were the parts affected; he was much out of health, and had a bloodless asthenic appearance, with constipated bowels. He, therefore, was directed to take aloetic aperients and chalybeates, whilst an ointment containing the sulphurets of mercury and iodine, was to be applied to the affected parts after the usual cleansings, &c., had been punctiliously performed. Of course I do not know what effect these means may have produced, but I cite the case to show the views I take of porriginous diseases, which I must tell you are often exceedingly difficult of cure, and do not terminate so readily in a healthy state of the parts as the examples I have detailed but I can assure you that where a strict compliance with my directions is practised, it very seldom happens that I have to write *no relief* against the case, on the attendance being discontinued.

You will perceive from the models to which I now point, that porrigo may occur on other parts of the body beside the scalp; the beautiful example, when the mouth and neck of the young man are affected, is particularly worthy of your attention as the peculiar cap-shaped crusts are apparent which characterise the disease. In the other case the buttocks and back of the thigh, are the seats of the complaint, and the same appearances may be remarked. Yet it must be observed that porrigo is a far less intractable disease, when thus situated, than when on the scalp; for instance, these cases, severe as the first referred to would seem to be, yielded in ten days or a fortnight to the administration of aperients and antacids; the local application being a dilute ointment of the nitric oxide of mercury—one-sixth of the pharmacopœial strength. I should mention also that the warm bath formed a part of this treatment. I had fully intended to have included the consideration of alopecia or diseased baldness in this lecture; but I find I shall be unable to accomplish it in the time allotted; this I do not regret, as I shall next week have an opportunity of entering more fully into the subject, and thus complete the description of diseases of the scalp by the mention of a class of complaints which have become especially common within the last few years, and seem dependent upon a specific disordered or inflammatory action in the hair bulbs or follicles, which would appear contagious under certain circumstances, the precise nature of which, I regret to say, still remains a subject of contrariety of opinion, in consequence of deficient investigation. No complaint of the skin, however, merits more attention, as in conjunction with the malady we have just considered, it rages in our public and private schools, often decimating the pupils not by a destruction of their lives and health, but by exciting the terrors of their parents, who withdraw the clean and the unclean in the well-grounded fear that the former may become infected and lose much time and valuable tuition, and the latter are already tainted and must perform a domiciliary quarantine of a lengthened period. The diseases of the hair therefore, Gentlemen, will be the next subject on which I shall claim your attention.

ORIGINAL CONTRIBUTIONS.

CASE OF EXTRACTION OF A METALLIC SUBSTANCE IMPACTED IN THE GULLET.

By F. A. Bulley, Esq., F.R.C.S.E.,
Surgeon to the Royal Berkshire Hospital, Reading.

In the middle of the night of Saturday, February 7th, I was requested to attend Mr. J. L., a tradesman, residing in Reading, who I understood had accidentally swallowed something that had become impacted in the œsophagus, the exact nature of which, however, from the patient's being unable to articulate clearly, I could not at first make out. From the fear and confusion produced by his distressing condition, as well as from the pressure of the foreign substance, whatever it might be, upon the trachea, his power of utterance was almost entirely gone, and he could merely mutter the words "plate," "teeth," "bone;" but beyond this he could give me no idea of his sufferings, but it was evident that unless I were fortunate enough to relieve him quickly, he would soon sink from suffocation.

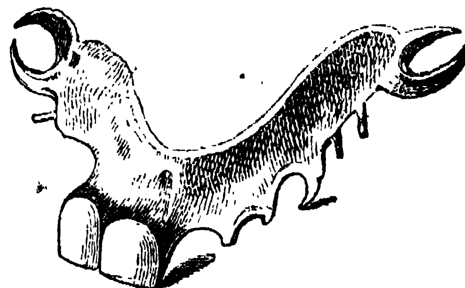
As every moment seemed to be of consequence, I placed the patient in a chair without delay, and passing my left fore-finger down the œsophagus, as far as it would reach, I succeeded in just touching some hard substance, which appeared to be slowly making its way downwards; for, whether from my having accidentally assisted its passage by the slight pressure of my finger, or from some other cause, I could not after a few moments continue to feel it. Under these circumstances I scarcely knew what was best to be done; the embarrassment of his breathing was momentarily increasing, and he seemed to be otherwise in a very critical condition.

The continued presence of the finger, however, in the gullet, producing a violent and excessive inverted action in the tube, and again, fortunately, brought the substance within its reach, but whether it was actually moved upwards, or whether being still impacted, it was merely lifted up by the general spasmodic elevation of the œsophagus, which happens in the act of vomiting, I am not prepared to say.

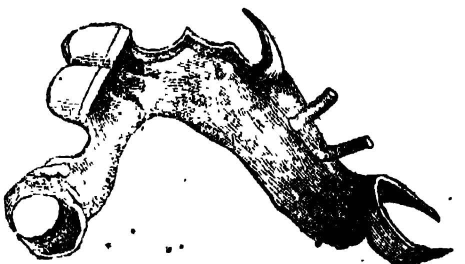
I now passed a pair of short-curved polypus forceps by the side of the finger, and while the substance was still in contact with the end of the finger succeeded in catching it between the blades. Feeling certain by the touch that it was of a metallic nature, and from the circumstance of his having, although indistinctly, spoken of his teeth, I concluded that he had swallowed a part of a set of artificial teeth, which he had been in the habit of wearing, but had usually removed at night. Continuing my finger in the gullet, I succeeded by its assistance in so easing the substance off the sides of the passage as to enable me to draw it upwards, with some little difficulty, for the space of about an inch. When it had arrived opposite the central portion of the thyroid cartilage, its further progress was stopped probably from some part of it having become entangled in the soft posterior wall of the larynx; the difficulty of breathing increased, and he seemed momentarily in danger of suffocation. I could now no longer afford any assistance by my finger, and as, moreover, its continued presence in the tube appeared to increase his suffocating feelings, I was obliged to withdaw it.

As there was apparently, at this critical moment, no probability of extracting the substance, but by sheer force, and feeling unwilling after getting it so far to relinquish my hold of it, I endeavoured, with the forceps in both hands using a twisting motion to bring it into the pharynx, in which I fortunately succeeded, when the instrument slipped, and I ultimately removed the foreign body with my finger. The operation was followed by hemorrhage to the extent of about four ounces, which was, however, subdued by the patient's drinking, plentifully, of cold water.

The substance extracted proved to be a gold frame-work or plate, such as is used for the fixture of artificial teeth, and measured exactly two and a half inches in its longest diameter, and one and a-half inches in the shortest. Attached to its an-



terior edge were two artificial teeth intended to supply the place of the two central incisors of the upper jaw, and on its under surface farther back, were two gold pins, which had been used to fix two other teeth, but which had become separated from the pins and lost some time before the accident. The hooked extremities of the plate, as shown in the woodcut, were intended to fix it to two of the



natural molar teeth, and it was to the circumstance of these teeth having become decayed that the patient attributed the loss of its attachment to the jaw.

When he had somewhat recovered his power of speech and self-possession, he told us that he was awoke in the night by an odd sensation in his throat, as if (to use his own expression) "a part of the gristle of his windpipe had got out of order," the idea of his having swallowed the teeth not having crossed his mind; that he then passed his finger down his throat, and succeeded in pressing the body downwards, when he felt satisfied that he had "righted the part," and experienced little further inconvenience for nearly half an hour, during which time he thought he must have gone to sleep, as he felt suddenly to awake with a suffocating sensation, which continued increasing until the period when he reached my house.

His recovery was rapid and uninterrupted. The morning following the extraction he complained of a fulness in the throat, and a great stiffness in the part, especially in swallowing. These symptoms were relieved by the application of ten leeches, followed by a bran poultice made with a decoction of camomile and poppy heads. He was ordered to take some demulcent medicine, and to abstain entirely from solid food, his principal aliment consisting of very thin arrow-root, which he said relieved the stiffness and pain more than anything else he took. He had scarcely any fever during the period of his convalescence.

At the end of a week he was so far recovered as to be able to take toast and a little animal food, without inconvenience; from this time he gradually improved, losing all uneasiness in the part, and has remained perfectly free from any uneasiness in the throat ever since.

REMARKS.

The foregoing case presents several points of interest, both in a surgical and physiological point of view. The little inconvenience the patient experienced at first, in the passage of so large a substance down the œsophagus, if we may credit his own account, is a circumstance not easily explained. Possibly, not imagining the real cause of his sensations, and being in a half sleepy state, he might have thought that an accident to the windpipe had actually occurred, and he might have fancied he had righted it. How he could have remained so long afterwards, however, without feeling inconvenience, I am at a loss to say. The substance must have passed quickly and with comparative ease through that portion of the gullet which lies behind the larynx, aided by the pressure of his finger and the action of the constrictors of the pharynx, otherwise the sensation of suffocation would have earlier roused him to a sense of his danger; afterwards, when it had become impacted in that part of the œsophagus, where it was found, just below the level of the cricoid cartilage, it might not have pressed upon the trachea at first, until the natural propulsive action had changed its position in the tube. Again, if it were not of itself a cause of mechanical pressure upon the air tube, the disturbance which its continued presence in such a situation would produce to the nerves of the part, might sympathetically affect those of the trachea, and thus account for the suffocating feelings which after a time he experienced. In respect to the extraction I have very little to remark: had I been aware of the ragged and uneven nature of the substance to be extracted, I might perhaps have hesitated about using the degree of force sufficient to dislodge and remove it, for fear of lacerating the œsophagus and injuring some important vessel, which might have proved immediately fatal to the patient. On the other hand, finding it was after a time not readily drawn upwards, I might, acting under the same ignorance of its nature, have attempted to force it downwards with a probang—an operation which, even had I been able to accomplish its removal into the stomach, must have inevitably proved fatal to the patient. The most singular part of the case was the remarkably small amount of injury done to the œsophagus by the somewhat violent extraction, freedom from after bad consequences which the patient experienced, and the trifling hemorrhage that followed it.

In conclusion, I trust that the publication of this case will not create any unnecessary alarm in the minds of those who are compelled to resort to mechanical contrivances as substitutes for the natural teeth, which, generally speaking, through the ingenuity of modern science, are admirably adapted to the purposes they are intended to answer.

The extreme rareness of an accident of the kind detailed, proves how little danger is attached to wearing them, provided ordinary attention is used to observe when they are getting out of repair. And I would only suggest, by way of caution to those who use them, that as soon as the fastenings appear to have become in the least insecure, or there is reason to believe that the exact relation of the artificial mechanism to the natural gum has become disturbed, as in course of time it must, the patient should discontinue wearing it at night until it has undergone a thorough readjustment. Had the patient in this case given directions for the bands or fastenings of the plate to be extended to other and sounder teeth when he found it was becoming loose from the loss of its old supports, the accident which nearly cost him his life would most probably never have happened.

CLINICAL NOTES.
No. III.

By Richard de Gumbleton Daunt, Esq., M.D. (Edinburgh).

Member of the Faculty of Physicians of Rio de Janeiro and late Honorary Secretary of the Parisian Medical Society, &c.

The tales of secret and slow poisoning which occupied the attention of Europe in past centuries, are now generally discredited—with or without reason, this is not the place to decide. A fact, however, which should be constantly present to every practitioner in treating disease among the slave population of Brazil, is that under the name of *feitico* (a Portuguese African word, embracing the idea of charms, philters, poison, when administered in certain forms), poisoning is frequently practised, and so expert are its administrators that diseases of many varieties are simulated, and every possible gradation of time may be occupied by the poison to produce its effects, so that the victim of feitico may apparently succumb to a lingering marasmus, or a violent colic. Such art and the dexterity with which it is practised, implies an appropriate education, and the possession of much and exact traditional knowledge by the negroes, and it will be more easily accredited that it is so, when it is known that in some parts of Brazil (and I speak with special reference to the interior of the province of San Paulo, where I now reside) there exists among the slave population a secret fraternity analogous to the society of Thugs of India, who also consider it the discharge of a religious obligation to murder annually a certain number of persons chosen, however, always from amongst the blacks themselves, and rarely or never from the families of their masters. In this society there are several grades, and the fitness of the aspirants to become acquainted with the more esoteric doctrines, is supposed to be tested by the ability with which they cause one or more deaths. Often their own nearest relatives being selected, the better to prove their firmness. Here, however, poison has replaced the cord of the Thug—a not infrequent mode of administering it is by a pinch of snuff, and there is one most authentic case of death in this way produced on the intended assassin himself, which occurred in the centre of this province. Mesmerism, which is practised by the adepts, also, it is supposed by some well-qualified to judge, enters much into their means of exhausting vitality. It is a singular fact that many dying lingeringly, will often pertinaciously assert that such an one of their fellow-slaves, is murdering them, alleging as a reason that nightly they dream of him, and the subsequent confession of the accused not unfrequently justifies the accusation. May we not explain this by the supposition that a partial reminiscence is left of the Mesmeric processes, to which, during sleep, they are subjected.

This terrible brotherhood is out of reach of justice, so difficult is it to reduce the slave population to the action of the courts of law; and the proprietors of estates having an abhorrence of the interference of government in what affects their slaves (I speak of the interior), this state of things may continue yet for some years. There can be no doubt that this society—its dogmas—its miraculous art of poisoning are all of African origin, and not in any way connected with other causes than those which are purely African—a fact which renders unnecessary much waste of eloquence on the debasing effects of negro slavery, &c. Eugene Sue, speaking of Thuggism, in his "Juif Errant," says, "quelle religion! N'est ce pas la haine de l'humanité elevée par l'oppression jusq'au dernier degré d'exaltation? peut-être aussi que ce secte homicide dont l'origine se perd dans la nuit du temps se soit perpetué dans ces pays comme la seule protestation possible de l'esclavérie contre le despotisme." This is no doubt true, but I repeat, the institutions which fostered this detestable creed and practice, were those under which the African negro was born, not those under which he fell when he was transferred from slavery to his black chief to that of the white slaveholder. What I have stated above, is as nothing to what I might tell, were I writing for effect; but as my object is merely to make known for the benefit of those who may have to live among negroes, that slow poisoning is an art known and practised among them, I have said sufficient for my purpose.

Though sometimes practised to gratify private desire of revenge, yet more generally the victims are persons beloved or indifferent, and assassination is with the African, as with the Hindoo sect, a religious duty of an exalted nature. The poisons are chiefly vegetable, but parts of toads and snakes, and even infants, are used in the carrying on of their obscene mysteries.

Spiders also afford some fatal poisons used by the *Feiticero*, as the votaries of this learning are called. All this is a melancholy detail; but if in England, in the nineteenth century, wise women are consulted and philters are administered, what can be expected in the woods of interior Brazil. Medical men here rarely treat cases of feitico, these being generally handed over to a class of quacks, who are specialists, confining themselves to the study of antidotes for them, as might be expected; however, for one case of feitico, these men treat under this name fifty of legitimate organic disease.

I shall now pass on to notice two cases which have lately been treated by me—one that of a negro, whom, when called to, I found labouring under violent cramps of the entire muscular system, with vomitings of a dirty watery liquid, in large quantity, and accusing sensations of acute distress in the epigastric region, but without traceable disease of any organ in special; his state appeared most highly dangerous; the pulse small and slow, and temperature reduced; there was no recognisable cause of the attack. When seen it had lasted about thirty hours; the diagnosis was not clear, and while admitting the possibility of a cerebral affection, I determined to treat the case as one of perverted function of the great centres of the organic nervous system—the solar plexus and semilunar ganglia. I therefore prescribed sinapisms to various parts, and internally the following pills:—R. Bismuthi tris-nitratis, gr. xxiv; Extracti belladonnæ, gr. ij. M. secundum artem ut sit massa, in pil. eq. viij, divid. One of these was directed to be given every two hours until the symptoms yielded—an object attained after the third dose. They were then taken at longer intervals, and with no other application he recovered health in a few days; the convalescence being somewhat impeded by the exhausted state into which he fell; the alvine secretions were natural in all respects during the disease. This case is well illustrative of the valuable action of bismuth, in all cases of exalted or perverted vitality of the great sympathetic, and its chief plexus and ganglia.

The second case is one of hematuria of a year's duration, attended with great perversion of the nutritive functions, and alteration of the secretions and actions of most of the organs of the body. After some exploratory treatment, I arrived at the conclusion, that the case was one of expansion of the structure of the venous capillaries of the kidneys, and as the appropriate treatment was also in harmony with the general state of health of the patient, a married female, aged thirty, I prescribed for her a nitric acid lemonade, together with citrate of

iron in pills, attending to sundry other symptoms, and combating them with appropriate remedies: the nitric acid and the citrate of iron, after being taken for some time, had the effect of entirely removing the hæmaturia, and restoring the urine to its natural standard in quality and quantity; and—tried by the test of the juvantia and lædantia—I, with the satisfaction of seeing the patient restored to health, consider myself entitled to the collateral one of seeing my diagnosis verified. I may add that the presence of blood in the urine was proved positively by the microscope, and the absence of purpurine or other colouring matters negatively by the application of the proper reagents by an able chemist, I prescribed nitric acid as a ready means of increasing the amount of oxygen in the system.

City of Campinas,
Interior of the Province of San Paulo, Brazil,
February, 1846.

P.S. In an early article I shall give an account of the results of trials of guano, in the cure of leprosy—the tubercular elephantiasis of the Greeks—made in this country since the commencement of the present year, and which promise to be little less important to humanity than the greatest discovery yet made in physic.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS PANSON, Esq., of St. George's Hospital.

MEDICAL CASES.

Case VI.

CASE OF RHEUMATIC PERICARDITIS.

William Garlick, aged twenty-two, labourer—admitted by Dr. Wilson.

June 6. Skin warm, perspiring; pulse 98, full; tongue covered with a white fur, except at the edges, where it is red; urine high coloured; bowels confined.

He states that a week ago, after exposure to wet, he got a cold, with stiff neck, and some pain and stiffness about his ankles. On the 5th the stiffness of neck had disappeared, but he felt much worse. His right ankle, knee, and hip had become so painful that he dared not move them in the least. There appeared to be considerable heat around the affected joints; little or no swelling; with slight redness, which in some places followed the course of the tendons.

Ordered, Calomel, grs. v, hâc nocte; Haust. sennæ, ʒiss, cras mane; Haust. nitri c. Potas. nit., grs. x; Vin. colchici, *m.* xv, 6tis horis.

8. Copious perspiration, which is of a distinctly acid odour, and reddens litmus paper. Says he is rather more free from pain.

Perstat.

9. There is now much anxiety of countenance; restlessness; much dyspnœa, but little or no cough; he lies propped up in bed. Pulse 110, strong and jarring. He says that he has been much worse for the last twelve hours; it began with a pain, weight, and frequent palpitations of the heart; and of these he complains greatly at the present time. On placing the hand on the præcordia a strong jarring thrill is communicated by the pulsations of the heart, which are strong and tumultuous. Percussion did not discover dulness over a larger extent than natural; but this was hastily performed, as it gave him pain. Auscultation discovered a distinct, superficial friction sound, audible with both sounds of the heart, but more during the systole. This sound was heard equally when he held his breath; but it was not heard beyond the region of the heart, for on applying the stethoscope to the vessels of the neck the natural sounds were heard.

M.S. ad ℥ xij; R. Calomel, grs. iij; Opii. gr. ¼, 6ta quaque horâ. Appl. cat. sinapis reg epigast. Perst. in haust. ut antea.

10. Countenance less anxious; breathing not so frequent; pulse 96, softer; has no pain in the præcordia, except on motion. Bowels open; tongue white, but moist; skin moist, except over the chest, where it is hot and dry. He dozed occasionally last night, and says he feels much better this morning. Blood found buffed and cupped.

Perst. in rem.

V. s. ad ℥ xij.

11. Slept well last night. Tongue cleaner; pulse 78, soft; pains in joints much less; has only occasional pain in præcordia; friction sound still present, but more indistinct; the jarring thrill of the pulsations has quite disappeared; mouth sore.

Capt. pil. bis die tantum.

13. The to and fro sound is now very slight, and only to be heard during the systole. He has no pain in the chest, and only occasionally in the joints; pulse 62; tongue clean.

Perst. in rem.

Milk and arrow-root.

16. Friction sound gone; no pain either at the heart or in the limbs.

Capt. pil. omni nocte tantum.

Fish diet.

30. Up and dressed. Very hungry.

Omit. med.; Haust. nitri.; Haust. Cinchonæ, ℥vj, bis die.

Roast slice.

July 16. Left the hospital, apparently recovered.

REMARKS.

On this patient's admission he presented well marked symptoms of an inflammation, which from its peculiarities is denominated "acute rheumatism." It was confined chiefly to the vicinity of the larger joints, and to the fibrous tissues of those joints. The synovial membranes were little or not at all affected; indeed, when they are it is thought that the disease extends from the fibrous tissue by contiguity of surface. Another peculiarity was, that though there was considerable inflammation yet it did not go on to suppuration, as in common inflammation. Whenever this circumstance occurs, which is very rare, it is from the adjoining cellular tissue becoming affected. There was considerable pain, heat, and tenderness in the parts, so as, in fact, to abolish for a time all power of moving the limbs.

There was but very slight swelling, the parts merely appearing puffy. The redness also was inconsiderable, and for the most part followed the course of the tendons.

This was easily distinguished from the synovial form, which attacks the knee more frequently than any other part; has more swelling, which is evidently from fluid poured into its cavity. The constitutional symptoms also are not so high as in the fibrous form. In it (fibrous) we saw furred tongue; bounding pulse; acid sweats; urine high coloured. This, indeed, is the most common form of rheumatism; and in it perhaps there is a greater tendency to attack the cardiac membranes than in the synovial form. Another peculiarity which we often see, is the migratory character of the complaint; it will suddenly disappear in one part, while it attacks a fresh one; sometimes, however, it attacks fresh parts, without having ceased in those first affected. In this way it is that the membranes of the heart so frequently become affected; the pericardium being in a measure like the serous membrane of the joints, is liable to be attacked in the same manner. Thus it may follow the disappearance of the joint affection; or it may co-exist with it, the external affection becoming less severe after the pericardium has been attacked, as happened in the present case; or it may attack both joints and heart simultaneously.

Indeed, most cases of pericarditis arise in connexion with acute rheumatism, though it does acknowledge other causes, as cold, exciting passions, &c.

Inflammation of the pericardium, in the beginning, is said to be marked by redness of the membrane, with perhaps some diminution of the secretion, and thickening of the membrane, from effusion into the sub-serous cellular tissue by deranged action of its minute vessels; occasionally also ecchymoses, or red patches may be seen, from infiltration of minute quantities of blood into this tissue. The brilliancy and transparency of the membrane are also lost. The next series of changes are much more interesting. Coagulable lymph is thrown out by the inflamed membrane, in different parts, till at length it covers the whole surface. It may sometimes be deposited in shapeless masses; but more frequently it attaches itself to the cardiac surface of the sac. The thickness of this layer may vary from one to several lines. When first formed, its cohesion is very feeble, but after a time it possesses great firmness and elasticity. The effusion is often effected with very great rapidity; if it commence only on one surface of the membrane, it immediately irritates and inflames the opposite surface, causing rapid extension of the diseased action, and cohesion of the two surfaces together.

In a short time minute vessels may be seen ramifying through this layer, which may sometimes be clearly traced passing from the inflamed membrane to the effused lymph. Next the lymph becomes firmer, and its surface of an irregular laminated appearance, like a fine net-work; or, if more developed, like the inner surface of the second stomach of a calf. The more prominent points also adhere to the opposite surface, so as to connect the capsular to the cardiac portion of the pericardium. At the same time as this lymph is thrown out, there is also generally some serous, or sero-purulent fluid effused; seldom, however, in much quantity, until after some effusion of lymph has taken place. Sometimes they are secreted together, and separate afterwards into liquid serum and fibrinous false membrane.

I apprehend that in the present case the effusion consisted almost wholly of fibrinous lymph, with little or no serum. If any serum were present, it must have been only a thin layer, which gravitated to the posterior part of the sac, so as not to interfere with our diagnosis.

Few cases of pericarditis terminate without the internal surface also of the heart becoming affected, especially that part which forms the valves, and we have accordingly endocarditis. Occasionally, also, the external surface of the pericardium partakes in the inflammatory action; this, however, mostly happens where the disease becomes complicated with pleuritis or pneumonia. We could not detect the existence of any endocarditis in our patient, which we should probably have done by the physical signs, had any really been present; neither had we any cause to suspect inflammation of the outer surface of the pericardium.

Pericarditis is sometimes said to terminate in resolution and absorption of the effused lymph, but this, unfortunately, is not of frequent occurrence. If the patient's constitution have been previously good, and the inflammation not of a low type, the effused lymph unites the two surfaces of the sac together, and puts a stop to further change for a time. But if the inflammation be of a low kind, serum instead of lymph is effused, or if any lymph be thrown out, it becomes a secreting surface, pouring out more fluid.

To the second, or adhesive form, we must impute the recovery of our patient.

Dr. Williams thinks that according to the length of time which elapses before the lymph causes adhesion, will be the character of those adhesions. If this happen early, and before the liquid effusion is great, the adhesions will be mobile, interfering but little with the action of the heart; but if the liquid be abundant, the lymph will not cause adhesion until its vitality is impaired, so that it only forms dense and fibrinous adhesions, which shackle the motions of the heart, and lead soon to other structural changes.

He also says that adhesion is no security against future similar attacks, as he has often found traces of fresh inflammation in the old adhesions; and as the liquid could not be effused into the agglutinated sac, it has taken place into the adjoining sac of the pleura.

The general symptoms, in the present case, were well-marked; the greatly increased strength and quickness of pulse; the sense of oppression; dyspnœa; quick and anxious respiration; the sense of fulness and constriction in the præcordia, were very distinctive signs. But these are not found constant in every case; indeed, sometimes they are almost wholly wanting. Sometimes delirium arises, and this may draw the attention of the careless observer away from the real seat of the disease. It was by these means that inflammation of the pericardium used formerly to be so frequently overlooked, and its presence not discovered until after death, or when, in after years, its effects had

wrought structural changes in the heart. Now, however, we should be very culpable to overlook its presence, as we possess such invaluable resources in the physical signs which the disease presents. These in our patient were very well marked, and could not fail to bring us to a correct diagnosis. There was acute pain from the commencement, increased by pressure, and confined to the vicinity of the heart; this is perhaps the most constant symptom in this disease; sometimes it is observed for several hours before any morbid sound can be detected, and is thus valuable as enabling us to commence the treatment much earlier. It is still more marked when the pleura in the vicinity is affected. The pulsations of the heart were stronger than natural, tumultuous, and communicating a jarring thrill to the hand. Prominence of the præcordia was not observed; this generally proceeds from effused fluid. Percussion gave us only negative evidence; there was no sensible increase of dulness; this only happens, in fact, when there is much fluid present, and it is then extremely valuable.

The friction sound which auscultation discovered, proceeded from the surfaces of the pericardium being roughened by lymph; at one time it was thought that this sound might be produced by mere capillary injection, with increased dryness of the internal surface; but from experiments instituted by Drs. Todd, Williams, &c., it was found that these causes were not sufficient. We could detect no sound like the creaking of a new saddle; Dr. Copland believes that this exists chiefly in the chronic form of the complaint, and that it depends on thickening of the pericardium.

The friction sound in our patient was distinguished from that which occurs in pleurisy by being equally audible when the patient held his breath, and by the almost absence of cough compared with the dyspnœa. It was not the consequence of valvular disease, for the sounds were superficial and sudden; accompanying both sounds of the heart, although louder during the first. They were also limited in extent, the natural sounds of the heart being detected in the large vessels of the neck. It also rapidly disappeared under treatment.

A favourable prognosis was all along entertained concerning this case, notwithstanding its severity in the outset; for the patient was tolerably robust; it was his first attack; he was not advanced in life; there was no fluid effused; and the pulse, though rapid, was of good volume. It was also not so complicated as some cases. The most frequent complications of this disease are with articular rheumatism, or with internal carditis, or perhaps with both of these conjoined; with pleuritis; with pleuro-pneumonia; with diaphragmitis; with carditis; with peritonitis, enteritis, or with eruptive fevers.

The age in which this disease is most frequent, is between that of childhood and thirty-five years; indeed, when children are attacked with acute rheumatism it is mostly combined with this disease.

When the abnormal sound was no longer audible, of course we did not imagine that the pericardium had returned to its former healthy condition. Its cessation, doubtless, depended on the adhesion of the two surfaces; this, though almost as favourable a termination as we could have hoped for, will lead ultimately to more serious alterations of the heart. However, the patient imagined himself cured, and it may be years before the effects of these changes are observed.

The *treatment* of this case in the commencement was directed merely to subdue the rheumatic symptoms; but on the supervention of the cardiac disease, vigorous depletive measures were instantly employed. In each of the three forms of carditis, copious venesection is necessary at the outset, but more especially so in pericarditis. Every symptom in the present case indicated the necessity for it. Its repetition was not decided on because of the buffed and cupped state of the blood; for as the disease was complicated with rheumatism, that condition would continue even after a sufficient quantity of blood had been withdrawn. Indeed, had we depended on the general symptoms alone, a second detraction of blood might not have been adopted, and the disease would thus have gained time to renew its former violence. The physical signs showed, however, that the disease was not yet subdued, and further depletion was carried into effect. Mercury was at the same time quickly introduced, so as to obtain its specific effects. The colchicum was also continued, and it was especially useful, both from its influence over the joints, and in abating the violent action of the heart.

The mercurial action was continued for rather a long time, in order more effectually to prevent a return of the inflammatory action.

By these means the effusion of serum was happily prevented, and the patient was apparently restored to health. But if we had the opportunity of watching him in after years, we should probably find hypertrophy, dilatation, or some other morbid change in the heart, shortening his existence.

REVIEWS.

Lectures on the Nature and Treatment of Deformities. Delivered at the Royal Orthopœdic Hospital, Bloomsbury-square, by R. W. Tamplin, F.R.C.S.E., Surgeon to the Hospital.

This work is dedicated to Mr. Lawrence, of St. Bartholomew's Hospital, whose disinterested kindness, courtesy, and assistance to the author is gratefully acknowledged in a short preface addressed to that gentleman. Mr. Lawrence, it appears from that preface, attends the hospital, rendering assistance when required; this is of course quite disinterested, seeing that there is no hospital staff, as we usually find—Mr. Tamplin being the alpha and omega—the founder—the proprietor—the schemer—the sole functionary of the hospital. In the getting up of similar London institutions there is generally a staff—a family arrangement—an assistance from various quarters. Some figure as consulting and honorary physicians and surgeons, others as acting, others as assisting. Mr. Tamplin seems to have thought that too many cooks spoil broth, and too large a staff may ruin an hospital, whether royal or not. Operations get rarer and rarer, and are so difficult to be had that they bear a premium of 2s. 6d. each in a borough hospital. This may or may not be true, nor do we vouch for its truth, but even the mere rumour shows how well the limbs of the public are looked after. Mr. Tamplin, the sole schemer or projector, sole surgeon and physician, also founds, maintains, and supports the hospital. It seems a great undertaking. Lord Brougham founded a college and called it a university, hoping that the old lawyer's tricks of a play on words would pass unnoticed, and that which was usually called a university would in time pass for a university, acquire by the courtesy of time and error the right of a university, and be universally mistaken for such; but here the lawyers and the clergy were too sharp for him, and so his university dwindled into a college; and it is just possible that in time the Royal Orthopœdic Hospital may prove a dispensary—not for want of funds but of material. This was at first our feeling on reading Mr. Tamplin's lectures; a year or two, we said, must clear the streets of London of all cripples, all deformed persons; and then—we walked about for a day or two, and discovered that cripples and deformed persons do still so abound that we cannot hope for the final cure of all, even by Mr. Tamplin, for some considerable time. The number of cases recorded is certainly most astounding; a never-failing practice has been discovered—a bloodless puncture and incision—a little confinement and bandaging—*voila tout!*

Before we describe this immortal discovery, which John Bull imported, as he has done most other discoveries, from the continent, let us say at once that this book of Mr. Tamplin's is an excellent book; well written, and full of good and sound remarks. In criticising certain details we beg the reader to keep this in mind. Nothing is advocated here either rash or cruel—still the amount of cases oppresses us, and makes us ponder on the probable reason—makes us wish for *sure statistics;* not numbers merely, but numbers on which we might calculate. This delicate matter we leave in the hands of the reader, always reminding the young surgeon to read this book, which is sure to remove from his mind many prejudices.

Some eighteen years ago or more, a French surgeon, Delpech, cut the tendo Achillcs in a patient who laboured under club-foot: this bold and original experiment was his discovery. He was followed afterwards by German, French, and English; he was the inventor; the genius and the merit belonged to him; the profit to his imitators. Burns wrote his immortal lyrics and starved—modern publishers gloat and fatten on his remains.

The discovery of Delpech led to a mania—the squint mania—then the club foot cure mania—the curved spine straightening mania—then came the stammering cure mania—until at last orthopédic and orthopœdists seemed fitly classed with dentists, and aurists, and chiropodists, and rectists, &c., peace be with them! Though pining away in oblivion; they are at least as respected as the homœopathists, the hydropathists, &c.

On this single application hinges the whole of Mr. Tamplin's work: are the muscles of a limb contracted?—cut the tendons. Are they relaxed?—cut the tendons. Is the limb distorted outwards, inwards, forwards, backwards?—there is no other remedy but—cut the tendons. It is a panacea, universal, never-failing. The importance of subcutaneous sections of the tendons we mean not to dispute; but this importance has been immensely overrated by Mr. Tamplin and orthopœdists. In lateral curves of the spine it has completely failed, and in the Academy of Medicine of Paris the pretended cures of some leading orthopœdists have been distinctly denied and refuted, or explained away. Here is the advantage of an open Academy of Medicine and Surgery—no little clubs—no venal cliques—no bringing forward stale, old matter as if it were a novelty. We want an academy terribly in London, before whose ordeal barber-surgeons would find their level, and so would orthopœdists.

Two thousand cases are spoken of; for how many cures? for we know very well by practising it, that it is an easy thing to divide a tendon, but not so easy to restore the limb to its full functions. We shall subsequently find that the author's theory (for there must always be a theory) as to the cause of most deformities, is malposition of the fœtus in utero. This theory we believe not in; it may be as good as others, but this says little for it. No true theory has ever yet been devised to explain the nature of congenital deformities, or of deformities which arise obviously from congenital predisposition—these cases coming under the same category—he admits double varus to be, sometimes hereditary—having found it so in eight cases. Harelip is frequently hereditary, as we know; and so also is club-foot or talipes equinus, as the pompous and pedantic orthopœdists call a peculiar deformity of the foot. Scarcely had we got to page 40, when we began to suspect that Mr. Tamplin had been educated in the far-famed University of Edinburgh, or near it; no difficulty stops him, so that every why takes wherefore; we could almost have fancied we were hopping to some other Edinburgh worthies who had attempted to give a reason for all things, excepting how they themselves came there—that they leave to others. The *spelling* began to look ill, another characteristic of an Edinburgh University education—the professors there being too high worded ever to regard bad English or worse Latin—accordingly we find "hear" for "here," "losely" for "loosely"—cito, tuto et *jecunde;* " such phrases as 'who I assisted to operate upon,' 'peroneii,' 'that the ilii and scapulæ are enormously hypertrophied,' " &c.

At page 60 there is an amusing case of wound of the internal plantar prettily managed; the case came, as all such cases do, into the hands of an anatomical surgeon, who put a ligature on the artery, or enabled Mr. Tamplin to do so—it matters not which. The great question of attrition of cartilage by friction, under certain circumstances, has not been pathologically examined in this work—it is denied, but without any foundation. The medical treatment consists in the old remedies of the London schools—the everlasting blue pill and black draught—the hydrarg. c. creta—he calls it doses of the hydrargyri c. creta.

His great theory is "mal-position of the child in utero." But unless there be also a deficiency of, the liquor amnii we do not see how this can happen; and, even after granting this, the theory is untenable. Relaxation, con-

genital or accidental, partial or acquired, will explain many cases of deformities; in others, congenital predisposition must be taken into account. Partial dislocation of the great toe, mistaken so long by surgeons for a disease called bunnion, Mr. Tamplin ascribes, against all reason, to the use of tight or too short boots or shoes—against all experience and every day observation. The congenital one—lapping of the toes—he also ascribes to the boot, although seen frequently in those who never wore either shoes or boots. Of lateral curvature of the spine our author evidently has had but small experience; but his remarks, so far as they go, are as usual judicious and careful.

In conclusion, then, we recommend the work to the young surgeon—not as one in which he can expect to find any deep or profound pathological or physiological inquiries into the rationale of deformities, nor as one in which he will expect to gain any information as to the real causes of disease, its seat and consequences, but as a work showing how far the genius of one man, Delpech, could influence a whole profession.

The book is "a respectable advertisement" to the hospital: we for an instant imagined it to be intended for the general as well as the professional reader, but we think and hope otherwise, else on no account would we have meddled with it. The occurrence of a fig leaf first suggested this idea, which we readily abandon.

A System of Practical Surgery. By WILLIAM FERGUSSON, Esq., F.R.S.E., Professor of Surgery in King's College, London, Surgeon to King's College Hospital, &c. &c. 2nd edit. Churchill. 1846.

Although Mr. Fergusson has retained the title, "A System of Surgery," to which we objected when reviewing the first edition of the work, he has shown, in the preface to the present edition, to what extent the term is applicable to his work, and in so far a satisfactory manner, that unless we were inclined to be captious, we could not cavil at it.

To this, the second edition, Mr. Fergusson has made considerable additions and improvements, taking advantage of such suggestions offered by his reviewers, as were calculated to add to its value. By thus acting, the author has shown himself possessed of great good sense, and free from the feeling which influences the greater part of the *irritabile genus*, who are generally unwilling to avail themselves of the advice and opinions of their critics, although tendered in a friendly mood. He has produced an excellent work, full of practical information—one which deserves, and will doubtlessly receive, the meed of approbation from the profession, as evinced by an extensive and rapid sale.

Dr. Quain's Anatomy. By DR. SHARPEY and MR. QUAIN. Part II. 5th Edition. London: Taylor and Walton, Upper Gower-Street. 1846.

Dr. Sharpey and Mr. Quain will have conferred a great favour on anatomical students when this valuable work is completed.

It is unnecessary at this period of its history to offer any recommendation of Dr. Quain's work on descriptive anatomy; it is too well-known to the British student to require further encomium. The work, however, as originally published, was not preceded by any systematic preliminary discourse on general anatomy, which in the later editions was introduced; in this, the fifth edition of the book, a scientific and beautiful outline is given of the present condition of our knowledge in this department of anatomical inquiry. It is of the utmost importance that the student should have *fresh* information, in a division of his studies where, from day to day, new light is being introduced, more especially from the improving application of the microscope and other means of observation and analysis.

By the reading of a few valuable pages, he will be informed of that which has hitherto been done, and may at the same time be enabled to understand something of that which remains yet to be accomplished in the unveiling, by the microscope and other means, of the minutiæ of human organisation.

"Non est fingendum nec excogitandum sed inveniendum quid natura faciat aut ferat," is an expression of Bacon which strongly reminds us of the difference between the dreams of the older and the observations and researches of the later physiologists, and of such researches the introductory portion of the new edition of Quain's Anatomy gives no mean idea.

We purpose to notice the work more at length after the publication of its concluding portion; meanwhile, we may say that in this second part, we observe considerable improvement in the division on descriptive anatomy, as well as in the excellence of the preliminary treatise, the first part of which we have previously noticed.

TO CORRESPONDENTS.

The letter on the General Medical Annuity Fund in our next.

A Subscriber, Kilkenny, *with the qualifications named, can practise undisturbed in France among* English *residents; but the privilege, we believe, is possessed by courtesy, rather than by law.*

A Dublin Subscriber *will find the recipes he wants in the former copies of the* Pharmaceutical Number of the Medical Times.

E. A.—*We very much doubt whether the diploma of the English College of Surgeons is worth the money it costs, and we are quite sure that* E. A., *as a "Licentiate" of the Hall, and as having gone through a surgical curriculum of study, should not have his qualifications as a "surgeon" impeached.* Legally, *the diploma of the College is not worth a shilling; morally, it is not one half the test of professional competency, that the licence of the Society of Apothecaries is. We doubt there being any case for an action for slander.*

R. W.—*The contribution contains nothing new.*

M. D.—*Is it worth while to publish so long a paper just to show that the practical management of the voice by elocutionary means is no part of the medical profession? If people will write earnest madness, must we have the penalty of correcting them?*

Enquirer *had better address his queries to Mr. Startin himself. We do not prescribe through the columns of the* Medical Times. *It might be intercepting a fee from one of our subscribers.*

The following petition has been signed by all the surgeons and physicians of Southampton:—

That disease is constantly occasioned and aggravated among the labouring classes, and the poor, by the want of personal and domestic cleanliness; and the overcrowding of their dwellings in very many cases, renders their cultivation of habits of cleanliness almost impossible.

That the rich are deeply interested in the health of the poor, not only on economic grounds, but also because many infectious disorders which eventually attack individuals of all ranks originate in, and spread from, the densely crowded quarters inhabited by those who are the poorest.

That if the labouring and poorer classes had opportunities of bathing frequently, and the means of washing and drying their clothes out of the rooms in which they live, at a moderate expense, their condition would be, in some respects, greatly improved, and the consequences of their availing themselves of these opportunities would be beneficial to all classes.

Your petitioners, therefore, humbly pray that your Right Honourable House will be pleased to pass such a law as to enable all boroughs and parishes desirous of adopting it to establish public baths and washhouses as to your wisdom shall seem fit.

And your Petitioners will ever pray.

☞ *There are some subscribers who have not yet sent us their remittances. They are requested to lose no time in forwarding an enclosure, or a post-office order, or an order on some party in town. Acknowledgment will be given by return of post. Post-office orders must be drawn in favour of Mr. James Angerstein Carfrae. By a recent order of the Postmaster-General, the whole name is necessary.*

THE MEDICAL TIMES.

SATURDAY JUNE 20, 1846.

Ne cede malis.

THE re-organisation of the Profession involved in the scheme of the New Institute makes the proposition emphatically the great medical question of the hour. To overlook it by studied design, or to attempt to underrate it with faint notice or ambiguous reference, would be an act of treachery to the best interests of the Profession.

The question whether we should seek the New Institute or not, will depend for its answer on a dispassionate consideration of the present state and prospects of our body.

Now, how stands our case? Under every aspect we are dissatisfied, and have cause to be dissatisfied. The universal discontent and uneasiness that pervade the Profession form the conclusive evidence both of the existence and of the extent of grievances. "Whatever *is is*" *wrong*. There is something amiss with Physicians—with Surgeons—with General Practitioners—and the malady is not lessened because the pharmaceutical body are beginning to ask for their place and share in the general broil. *It is a scientific community in a state of civil war.* A medical man's worst friend is his nearest professional brother. We are worse than Ishmaelites—for our hands are raised not only against others, but ourselves. It would appear as though some demon had been incessantly evangelising us with a gospel of hate, and that we had been regenerated into a creed of fiendish malignity. What interests us in private practice but the illiberal slander, the malevolent insinuation, the epithet of disparagement? There are not wanting hundreds of us to whom the most scientific member of our profession is a quack—the purest minded a hypocrite—the most useful a fool. Where is the living member of our body who has cast in our own days a halo of glory over its escutcheon that has received from the Profession a united or worthy homage? Low as may be our scientific position there are not wanting those who have *deserved* our gratitude. Where are they who have received it?

If the sweet be wanting without which the cup of life (whatever the other ingredients) must be bitter—if that mutual kindness exist not which alone can turn the curse of a shared toil into the blessing of a salutary responsibility—what is there in the pecuniary position of our members to soften down for us the sense of this professional calamity? We are incontestably the worst paid, and hardest worked—in one word, the poorest, class of persons exercising in this country the functions, or holding the position of a gentlemanly calling. *The aggregate annual receipts of our body would not suffice to support one-third of our members as gentlemen.* It is in this deplorable fact that we find the explanation of the various statements that are every day appearing before the public to the disparagement of our social standing. Hence it is that railway policemen are notified as being surgeons; that the word "surgeon" so often stands in the insolvents' list; that the peripatetic beggar of education is nine times in ten not a clergyman, nor a barrister, nor an attorney, nor a retired officer of either service — but a medical man; that the Post-office records point to medical men as the most migratory portion of our shifting population, and that the criminal records of our country so

often have associated with their proceedings the names of unfortunate members of our Profession.

The facts are repulsive—hideous. We are pained to be compelled to recognise their existence, and still more to record them; but there can be no good end answered by ingenious palliation, or studied concealment. The *social ulcer* is there; its nature is to grow aggravated, and its rapid course is onward to disorganisation and death. To shrink from exposing it, or refrain from efficient treatment, may be welcome perhaps to the patient, but would not be honest in the doctor. For our parts, we recognise no inconvenience from laying bare the malady. There are three to one against a medical man's securing the success necessary for a suitable support, and while this is the case there would be no such thing as relationship between cause and effect, if the Profession did not lapse into an uneasy state of disorder and anomaly.

This, then, rapidly, being our present state, what is the prospect of an amelioration? Is the public beginning to think better of us? Are our numbers growing less, and proportioned to the demand for our services? Are the medical institutions supported by our money, and existing for our benefit—legislating or administering for an improvement? Is there anything in the Professional disorganisation that will work its cure without our intervention? Alas!—the answer in each case is unsatisfactory. The prejudice of the public, whatever it be, is not diminishing. The plan of not seeking the aid of medical men till disease assumes an alarming character is daily extending. The minor ailments are now almost universally matters of self-medication, or, at most, of a gossipping consultation over a druggist's counter. Men fix on their "stimulant," or their "aperient," their "diuretic," or "pectoral," with as much confidence and self-satisfaction as they vary their night-cap with the temperature. Those that have less faith in themselves, have not, therefore, more faith in us. The druggist is every day more relied on, and the star of the advertising quack is not less than ever in the ascendant. If we had the statistics of medical treatment, we should find that legitimate medicine is only one of the many ways, and that not a wide one, which, according to patients, lead to a cure. Homœopathy, hydropathy, and patent medicines, form the sheet-anchor of the hopes of perhaps a majority of patients.

A confidence thus estranged and estranging is not, it may be feared, to be recalled by the *dolce far niente* of a Profession hurried by its very necessities from one depth of degradation to a lower.

What, then, are our hopes from our governing bodies? Can we doubt that they will only make confusion worse confounded? Their primary necessity—money (the more required because of their weakness, and spirit of competition)—enforces on them a continuance of the very mismanagement which has been our ruin. Their income springs from the extent in which they can manage to injure. We want subtraction; they cannot live without multiplication. They are, in fact, by a very necessity of their existence, the great ruining agencies of the Profession. They are institutions for the manufacture of competition in a body already too competing.

Such the state of affairs—such the prospect of their deterioration, no word should be required from us to raise the exertions of our medical brethren to a level with the emergency of their situation. There should be no lull of action till the efficient thing be done. Under present circumstances a breathing time of agitation is a dereliction of duty. Our responsibilities rise with the extent of the mischief to be averted, and in present apathy there is the commission of a crime. The New *Institute* offers us the only lever available for our rescue and elevation. Accepted and supported as it should be, it may be made the efficient agency for a thorough re-organisation of the Profession. It has a plastic power, and will become whatever the times require or we wish. Complete and brilliant would be the success—and at what price? *Our co-operation!* On what ground can we justify its implied refusal by our apathy and indifference? To stand aloof is not only to decline a boon for the present, but to make it unattainable for years.

CONTEMPORARY JEALOUSIES.

We have, during the last week, been surprised by the following note:—

32, Red Lion-square,
11th June, 1846.

Sir,—We are instructed by Messrs. Longman and Co. to say that they observe with regret the very copious and unjustifiable piracy you have made of the Medical Gazette, in the articles copied and inserted in the *Medical Times*, and to state that unless you immediately discontinue such piracy, and communicate to us within *two days* your intention to print no further articles from the Medical Gazette into the *Medical Times*, and make compensation to them for the past articles taken, our instructions are to commence legal proceedings against you forthwith.

We are, Sir, your's most obediently,
A. W. Turner.

We feel no disrespect to Messrs. Longman and Co., and no unkindness to the humble work for whose protection they have written us so extraordinary a note; but, considering the groundlessness of their charges, and the insulting tenor of their threats, we have felt ourselves justified in not deigning to give, not only the prompt reply they insist on, but any reply at all to their communication. We should be sorry to have our silence construed into an affront, for we meant it for something very different—something more congenial to *our* feelings, and better suited to our position; and Messrs. Longman and Co. will make no mistake in accepting it as, in a civil form, a very decided defiance.

What could have possessed the worthy publishers to speak of "very copious piracy" of their publication? Two columns a-week have not on an average been devoted by us to notice of their journal; and even to do it that extent of honour, we were at times compelled—as our readers may recollect—to give notice and circulation to common-place contributions which could only be classed as "scientific" by a strained courtesy of language. Now, two columns out of seventy-two would imply, that *for the thirty-sixth part of our journal* (about half-a-farthing's worth of its full price) *we have been indebted to that interesting record of scientific insolvencies—the Gazette;* and because we dedicate a thirty-sixth part of our journal to notices of what the poor thing (a ninepenny journal, too!) has been trying to do for medical science, we are assailed with the cry of a "very *copious* piracy" (what a *copia* there must be in the original to be thus *pirated* in so *copious* a fashion!)—ordered to cease the unjustifiable injustice, and finally, in a more sensible and mercantile spirit, asked to make *compensation* for the enormous losses we have thus been causing!

Our contemporary medical journals must surely be in a very deplorable condition financially. Sometime ago, by a trick of the law (which by the way we were not sorry to see employed), we were induced to contribute £150 (we fear to no purpose) to keep the Lancet on its legs—and now here are the proprietors of another unfortunate periodical making an appeal to us for pecuniary assistance. *Compensation!* Will Messrs. Longman kindly say to what extent in shillings, pence, and farthings we have injured their journal by our weekly reference to its no doubt very interesting contents! We should like to see the bill vastly, just premising, however, that it is not because the *Gazette* is going to the wall that our condensed notices are the cause.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Meeting of June 9th, 1846.

Cæsar Hawkins, Esq., in the Chair.

Observations on Venereal Diseases in the United Kingdom, from Statistical Reports, in the Army, Navy, and Merchant Service, with Remarks on the Mortality from Syphilis in the Metropolis, compiled from the Official Returns of the Registrar-General. By Wm. Acton, Surgeon to the Islington Dispensary.

The author stated that his object in the paper was not merely to give the dry statistical details of the official reports, but to call the attention of the Society to the practical facts founded on the calculations contained in the large-published folios, which hitherto had not met with any notice from the profession. He stated that in the army returns, the reports extended over a period of seven years and a quarter, and included the various venereal affections (8,072 in number) of the soldiers quartered in the United Kingdom (amounting to 44,611.)

He furnished a table, in which it might be seen that nearly one man in every five, or more correctly, 181 in every 1000, was attacked by venereal disease; and according to the army classification, one man out of 31 was attacked with true syphilis, one in 20 with *ulcus penis non-syphiliticum*, and one in 18 with gonorrhœa. The author further alluded to this classification of sores, and regarded it as incompatible with the present notions on venereal diseases. He called the attention of the army medical authorities to the large proportion of cases of secondary symptoms, which, according to this classification, amounted to one in every four men attacked with primary symptoms.

Mr. Acton next noticed the large proportion of cases of swelled testicle occurring in the ranks, as the return showed that one, in every three men attacked with gonorrhœa, suffered from swelled testicle, which he attributed to the soldiers probably taking violent remedies unknown to their surgeons, and to the numerous cases occurring among cavalry soldiers; but he directed attention to the fact, whatever might be the cause, as more frequent than in civil life.

The author alluded to the frequency of venereal diseases in the American and Belgian armies, and spoke of the probable causes of venereal diseases being most rife among our troops.

Passing to the navy returns, Mr. Acton gave tables of venereal diseases in the *home* service, showing that one out of every seven sailors suffered from venereal diseases. The author regretted that in these returns the cases of secondary symptoms were not separated from the primary ones. He noticed the large proportion of swelled testicles in the returns of the navy equalling that in the army.

In order to compare the proportions in the *merchants service*, the author furnished a table drawn up by Mr. Bush, surgeon to the Dreadnought Hospital Ship. It appeared that the large proportion of one out of every three patients admitted laboured under venereal diseases. He also gave a table to show that among the surgical out-

patients at St Bartholomew's Hospital, nearly one-half were affected with venereal diseases. The author called the attention of the profession to the impossibility of checking venereal diseases, except by police or government regulations, and entered into a calculation founded on the returns of the period of a soldier's stay in hospital, of the time he is incapacitated from duty, and of the expense of his maintenance whilst he is laid up.

The author, turning to the registered cases of deaths from syphilis, supplied a tabular statement, furnished by Major Graham, showing, that during the last half year the mortality from syphilis had been two a-week, and that one in 18,067 fell a victim to the disease. He divided the deaths into males and females, showing that there were 26 deaths among the latter and 27 among the former, and contended that prostitutes did not, as some had supposed, perish in large numbers from syphilis. He called attention to the novel fact, that the greatest mortality took place among children under one year of age, but that no period of life, from 17 to 64, was exempt from fatal cases of the disease. Out of 30 fatal cases of infantile syphilis he found the child born with traces of it in 13 cases, and the complaint proved fatal from one hour to thirty-nine weeks. In 12 cases the disease commenced between the first and twenty-sixth week after birth, and in 7 cases the period of its first appearance was not mentioned. The author entered into some details as to how syphilis proved fatal in the infant, and then discussed how it killed adults. He showed that death from disease of the bones was now seldom met with, and pointed to the few cases of death from phagedena in the late years compared with former years. He alluded to the opinion entertained by some persons, that women who had suffered from syphilis were more liable to other complaints, and showed such an opinion to be unfounded. The author concluded by expressing a hope that he had filled up one of those blanks on the subject of venereal diseases which the premature death of Parent Duchatelet had prevented that enlightened philanthropist from supplying.

Cases of Varicocele treated by Pressure, with Observations; by T. B. Curling, Esq., Lecturer on Surgery at the London Hospital.

The author stated, that three years ago a case of varicocele cured by the application of pressure to the spermatic veins came under his notice, and being struck with the peculiar adaptation of this plan of treatment to counteract the injurious effects of the dilated veins, he determined to give it a trial. He had since treated many cases of varicocele by pressure, and as a sufficient period had now elapsed to enable him to form a just opinion of the value of this plan of treatment, and of its advantages over other methods, he had ventured to submit the results of his experience in the management of this complaint to the consideration of the fellows of this Society.

The author detailed three cases of varicocele cured by pressure—the first at the end of nineteen months, the second at the end of seven months—and the third, a case of double varicocele, in ten months. He also alluded to four other cases in which this treatment had been successful in curing the disease. He remarked, that in these cases the dilatation of the veins had taken place at a comparatively early period of life, was not excessive, nor of long duration, but was productive of inconvenience and uneasiness, which could be only partially remedied by the use of the suspender; they were precisely the cases in which it was presumed that pressure by relieving the veins of the superincumbent weight of the blood, would enable their coats to recover their proper size and tone. Two other cases were related in which great and immediate relief of the distressing symptoms occasionally attendant on varicocele, was afforded by pressure, but the patients had not remained under treatment a sufficient period to enable him to judge of the ultimate results. The author remarked that little attention had been paid to constitutional treatment in varicocele, which was commonly regarded as exclusively a local disease. In the class of cases in which the benefit derived from pressure was most apparent, the patients were persons between eighteen and thirty-years of age, of weak frame and constitution, and subject to dyspepsia and whose venous system and circulation were feeble. In these cases the operation of local remedies might be aided materially by general treatment.

After noticing the liability of this disease to relapse, and for this reason, recommending the continued use of the truss for some time after all symptoms of the affection had been removed, the author adverted to another class of cases, in which the application of pressure was capable of giving considerable relief, though not of curing the disease. They were cases met with at a somewhat advanced period of life, in which the plexus of dilated veins was of large size and long standing, but productive of only slight inconvenience which might be remedied by the suspender, the application of pressure, however, not only removed that slight uneasiness, but also counteracted the tendency to further dilatation, and prevented wasting of the testicle, though the enlargement was too great to admit of the vessels being reduced to their former size. From these observations, the author considered the treatment by pressure to be applicable, either for the cure or relief of the majority of cases of varicocele occurring in practice, and its simplicity, freedom from all risk, and efficiency, in his opinion rendered it superior to every other method of treatment that had hitherto been tried. In all the cases which he had treated, he had employed the moc-main-lever truss, which seemed better adapted to make the necessary pressure at the abdominal ring, than any other instrument he knew of. In general, the truss need be worn only during the day; when the scrotum was pendulous, or the plexus of dilated veins considerable, he advised the addition of the silk-net suspender.

MESMERIC SURGERY.

(Extracted from the *Times*.)

A surgical operation performed by Dr. Loysel, at Cherbourg, on the 27th of May last, upon a mesmerised patient, has produced in that place an extraordinary sensation.

The particulars, as they appeared in the *Journal de Cherbourg*, signed and attested by the Sous-Prefect, the maritime authorities, the principal medical men, and many distinguished inhabitants of the place, who were present at the operation, are as follows:—

"At 40 minutes past four, p.m., of the day above named Dr Loysel, assisted by Dr. Gibon and three other medical men, performed, with remarkable talent and complete success, the operation hereafter described, upon a patient named François Baysett, aged eighteen, who was previously placed in a state of mesmerism and absolute insensibility.

"Since 4 o'clock, the patient being placed in an arm-chair, had been brought into the necessary state by M. Delente, by whom he had already been several times mesmerised. After about two minutes, the eyes of the patient closed by gentle degrees; the upper eyelids, agitated by a gentle trembling, rested firmly against the ball of the eye, which appeared convulsed under the eyebrow; the muscles of the neck gently relaxed, the head inclined backward, and rested upon the back of the chair. The patient held his arms crossed upon his chest, and his countenance bespoke the most absolute quietude. At this juncture the mesmeriser experimented upon the sensibility of the patient by puncturing his flesh repeatedly, of which he appeared quite unconscious.

"In the meantime, Dr. Loysel had prepared his instruments, and the medical assistants were ready to aid the operator. At 4h. 40m. the first incision was made, extending from the hinder part of the left lower jaw to beneath the symphisis of the chin. The operator then dissected with great caution, and speedily eradicated a mass consisting of seven glands united, of which the largest was of the form and size of an egg.

"The first dissection, notwithstanding the skill with which it was executed, did not last less than 10 minutes, and during that time the patient continued in a state of utter insensibility to pain, his features manifesting no motion, but continuing perfectly calm to such a degree as to denote the total absence of the smallest suffering. Nevertheless several of the spectators, unable any longer to endure the sight which this dreadful operation presented, quitted the apartment.

"The pulse, of which the state was ascertained previous to the operation, remained the same during and afterwards (84), and the heavings of the chest continued in a regular manner, and in perfect harmony with the beating of the heart.

"After an interval of a few minutes' rest, the doctor effected a fresh incision on the right side, extracting in the like manner two other glands, the patient remaining the same as during the first operation, maintaining a state of calm immobility altogether inexpressible.

"The two operations lasted altogether, including the interval of repose, 29 minutes. After which one of the spectators, who appeared particularly interested by this phenomenon, questioned the patient in the following manner:—

"'How do you find yourself?—Quite well, Sir.

"'Do you suffer now; I saw you suffered but a little while ago?—Not at all, Sir.

"At 31 minutes after 5 the dressing of the wounds commenced, which continued till 3 minutes before 6, when it was accomplished; then everything calculated to make a disagreeable impression upon the patient was removed from the apartment; and, having washed and adjusted his dress himself, he was awakened by his mesmeriser in less than a minute.

"Restored to the ordinary state of life, with all the apparent calmness of a comfortable existence, the patient declared to the numerous witnesses of the operation, who interrogated him upon the subject, with a lively emotion, that he had no knowledge or recollection whatever of what had just passed, that he was free from pain, and that, without the bandages which enveloped his head, he should have had no idea that the operation had been performed; and after having affectionately thanked the operator, the mesmeriser, and the medical gentlemen, he retired and proceeded on foot, and without any support, to his residence at Egneurdreville, about half a league from Cherbourg."

A SELECT PRACTICAL FORMULARY.

Translated from the French of M. Foy, Principal Pharmacien to the Hospital Saint Louis, at Paris.

Tartrate of Potash, Neutral.—*Solution:* Two to four drachms in four ounces of an appropriate menstruum. A gentle purgative, resembling cream of tartar, and, like it, useful in jaundice, gastric derangement, &c.

Tartrate of Potash and Soda.—*Solution:* One ounce to an ounce and a half in four ounces, of an appropriate menstruum. A gentle purgative, analogous to the bitartrate and neutral tartrate of potash.

Tincture of Opium, Acetic (Pharmacopœia of the United States of America).—One ounce of crude opium, cut in pieces, macerated for six or eight days in six ounces of very strong vinegar, and four ounces of alcohol at 33°—then expressed and filtered. This preparation, which contains nearly seven grains of crude opium in the drachm, is intended to replace the *Lancaster black drop*.

Tincture, Alcoholic, of Guaiacum Resin.—Two ounces of guajacum resin, dissolved in three pints, of sixteen ounces each, of tafia,* filtered, and set aside for use. Mode of exhibition, one to two teaspoonsful in the morning, fasting, in cases of gout.

Tincture of Aloes, Compound.—An officinal tincture prepared with aloes, white agaric, gentian, rhubarb, saffron, cinnamon, zedoary, treacle, sugar, and alcohol at 22°. Mode of exhibition: one to two drachms, pure, or diluted with a little water, in the morning fasting or before dinner; used as a stomachic, vermifuge, and slight purgative.

Tincture of Aloes, Compound (Bulletin de Ferussac).—A preparation in which there is aloes, myrrh, mastic, benzoin, calumba root, gentian, Geneva, and brandy, and which has been recommended in cases of Asiatic cholera, in the dose of

* A kind of spirit or brandy procured from the sugar-cane.—Trans.

from half an ounce to an ounce in a camphorated draught.

TINCTURE OF RHUBARB, AQUEOUS (Polish formula).—Twelve drachms of sliced rhubarb, two drachms of bruised cinnamon, digested during twelve hours in eight ounces of hot water, then filtered, and three drachms of carbonate of potash dissolved in the menstruum. Mode of exhibition: by spoonful during the day, as a tonic, stomachic, and purgative.

TINCTURE, AROMATIC.—See Eau de Bonferme.

*** That of Dr. Adorne is a mixture of one part of liquid ammonia and three parts of the compound alcoholate of turpentine: used in fumigations in cases of amaurosis. One or two drops are put on one hand, which is then rubbed briskly with the other, and brought as quickly as possibly near the eyes, when widely opened.

TINCTURE OF BESTUCHEF.—A solution of one part of the dry perchloruret of iron in seven parts of Hoffmann's liquor. Mode of exhibition: twenty to sixty drops in a draught; tonic and anti-spasmodic.

TINCTURE OF THE BUDS OF THE FILIX MAS (Peschier).—One ounce of the buds of the filix mas, eight ounces of sulphuric ether, macerated together for five or six days, then decanted and kept in a well-stoppered bottle. Mode of exhibition: eight to thirty drops in eight to thirty pills, as an anthelmintic.

TINCTURE OF BRUCINE.—See Alcohol of Brucine.

TINCTURE OF CINNAMON, COMPOUND (English Formula).—Six drachms of bruised cinnamon, three drachms of cardamom seeds, three drachms of long pepper, two drachms of ginger, one quart of spirit of wine, macerated together for a fortnight, and then filtered. Dose, one to four drachms, as an aromatic, cordial, tonic, and stomachic.

TINCTURE OF CARDAMOMS, COMPOUND (English Formula).—One drachm of cardamom seeds, one drachm of carraway seeds, one drachm of cochineal, two drachms of bruised cinnamon, two ounces of plumbs, sixteen ounces of spirit of wine, macerated together for a fortnight, and filtered. Mode of exhibition: one to eight drachms as a stimulant and stomachic.

TINCTURE OF CINCHONINE.—See Alcohol of Cinchonine.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—The following gentlemen were admitted licentiates on the 11th of June, 1846:—Michael Walling, John Kempthorne, Lewis Bossy, Henry Isaac Fotherby.

There are at present 52 professors and 200 students at the University of Kiel. Not quite 4 students to each master.

The Wurtemburg Government is actively engaged in endeavouring to diminish cretinism. The number of Cretins in that state amounts to 2,901 or one to every 600 inhabitants.

We are authorised to state that the bill against the two students of St. Bartholomew's Hospital, who were committed at Bow-street, on the accusation of stealing a silver fork (as reported in the *Times* and other journals), was ignored by the Grand Jury at the Central Criminal Court, although no witnesses were called for the defence. The Medical Council of the hospital have since instituted an inquiry into the whole matter, and have reported to the treasurer their conviction that the charge against the students was entirely without foundation.

ROYAL COLLEGE OF SURGEONS.—The following Gentlemen were admitted Members of this College, on the 12th inst., viz.:—Messrs. P. H. West, J. E. Watson, J. Smith, J. D. Simmie, A. M. Young, J. Whicher, J. S. Rowland, E. Reckitt, W. H. Ran-[illegible]rs, and G. McCarthy.

[illegible]MENTS.—Surgeons: T. Johnson, M.D., to the Spartan; Dr. King, to the Vindictive, to the [illegible]ge, *pro tem.*, of the Naval Hospital at Bermuda, Dr. Evans, invalided; J. M'Whinnie (assis[illegible]t), to the Hyacinth, from the Vindictive; W. [illegible]rea, from the Hyacinth to the Vindictive. Assistant-surgeons: C. P. Mingaye, to the Spartan; H. Loney, to the Caledonia, for service at Plymouth Hospital.

WAR-OFFICE, June 12th.—6th Foot: Henry Vercker Bindon, gent., to be assistant-surgeon. 88th Foot: Assistant-surgeon James Guy Piers Moore, from the 97th Foot, to be surgeon, vice Abraham James Nisbett Connell, M.D., who retires upon half-pay. 97th Foot: Charles Vidler Cay, gent., to be assistant-surgeon, vice Moore, promoted in the 88th Foot. Hospital Staff: Archibald Redfoord Ridway, M.B., to be assistant-surgeon to the Forces, vice Mostyn, appointed to the 6th Foot.

OBITUARY.—On the 8th inst., at Black Rock, Cork, John Browne, Esq., M.D. June 4th in Gorey, William Theodore Blake, Esq., M.D., aged 35. On the 4th ult., Dr. George Smith, of Flamborough, West, Canada, late of Miley-hall Blessington, Ireland. On the 29th ult., at Wigan, Mr. Alexander Shaw, surgeon. Medical Inspector of Factories, in the Wigan district. At 10, Hill-street, Edinburgh, on the 29th ultimo, William Balfour, Esq., M.D., L.R.C.S.E. On the 15th inst., at Olney, Bucks, aged 31, George Thomas Gauntlett, M.R.C.S.

The funds of the Hospital for Consumption and Diseases of the Chest, have lately been greatly increased by a contribution of £500, under the signature of "*Stratford*," and another donation of £100 from "*A Restored Individual*."

MEDICAL PROTECTION.—A meeting of medical practitioners was held last week at Shire-hall, Norfolk, for the purpose of considering the most effectual means of checking the progress of quackery, and suppressing the practices of unqualified medical practitioners. It was stated by Mr. D. Dalrymple that, from his official connection with the National Association, he had received numerous complaints from different parts of the country, of the great encroachments that were made upon the general practitioner, and that the last two years of agitation, and *quasi* legislation had done nothing for the settlement of the state of the profession, but had rather unsettled it. Unqualified practitioners were more numerous and more audacious, and the self-dubbed doctors were more impertinent than ever. Mr. Dalrymple said that the College of Surgeons, had unquestionably done much to lower the general body of the profession, by lowering the standard of qualification which was required for a member of the college, having reduced it from twenty-two years of age and six years' study, to twenty-one years of age and five years' study. It appeared to him that they were endeavouring to create two classes in the same college—a measure which he considered very unfair towards the general body, from whom the funds were derived. In conclusion, Mr. Dalrymple proposed the organisation of a "National Institute" for discountenancing quackery. Several gentlemen addressed the meeting, and various resolutions were passed for the purpose of carrying out the objects of the National Institute by the formation of a committee.

IBRAHIM PACHA AND M. LALLEMAND.—During the stay of Ibrahim Pacha in the capital of France, he was desirous of engaging the services of M. Lallemand, the author of the "*Pertes Séminales Involontaires*," as his medical attendant; the doctor accordingly gave up his practice for a considerable time, to attend on the son of Mehemet Ali, without, however, making any arrangement as to the fees or salary to be received for attending on the health of his highness; two or three days before the departure of Ibrahim Pacha for this country, he sent 50,000 francs (£2,000) to the learned professor. This sum was not considered satisfactory by M. Lallemand; he therefore respectfully submitted that he considered his fees should be estimated at 200,000 francs (£8,000). This intimation was very annoying to Ibrahim, who considering that, if he had undervalued the services of his doctor, the other had overvalued them, sent him an additional sum of £4,000, making in the whole the sum of 6,000, with which the learned gentleman expressed himself satisfied.

ROYAL COLLEGE OF SURGEONS OF IRELAND.—On Monday, June 1st, the college met, pursuant to charter, to elect officers to serve for the ensuing year, when the following gentlemen were elected:—President: Samuel Wilmot, Esq. Vice-President: J. W. Cusack, Esq. Secretary: Alexander Read, Esq. Council: Sir Philip Crampton, Bart.; Alexander Read; William Auchinleck; Richard Carmichael; James Kerin; Arthur Jacob; William Henry Porter; William Tagert; Thomas E. Beatty; William Hargrave; Charles Benson; Andrew Ellis; Robert C. Williams; Robert Harrison; Launcelot Armstrong; Leonard Trant; Francis Rynd; Robert Adams; James Barker.

The Annual Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, will be held at Bath, on Thursday, the 18th instant. The Annual Meeting of the South-Eastern Branch of the Provincial Medical and Surgical Association, will be held at Ashford, on Wednesday, the 24th instant. The Annual Meeting of the Yorkshire Branch of the Provincial Medical and Surgical Association, will be held at York, on Thursday, 25th instant. The Annual Meeting of the Newton Branch of the Provincial Medical and Surgical Association, will be held at Manchester, on Thursday, the 25th instant.

ROYAL OPHTHALMIC HOSPITAL.—The annual meeting of the governors of this Institution was held on Monday last, the report was highly satisfactory to the subscribers.

ESTEEM FOR THE PROFESSION.—We are happy to record the fact that a handsome tea-service of plate, has just been presented to Dr. John Lee, late of Market-Bosworth, on his removal to Ashbourn, in Derbyshire, as a memento of the esteem in which he was held by his numerous patients and friends in the former place.

DISEASE AMONGST CATTLE.—Pleuro-pneumonia is prevalent at the present time amongst cattle, to so great an extent as to prove fatal to one-half, or two thirds of a herd. The caprice of this disease is extraordinary, and as little to be accounted for as the potatoe murrain; it frequently breaks out on a farm where it had never been heard of before, or even known in the locality, and when once it has appeared extends to the neighbouring farms.

MINERALOGY OF SOUTH AFRICA.—Metallic ores of various descriptions, have just been discovered to abound in great quantities in the Southern parts of the continent of Africa. Iron is everywhere abundant, manganese is a common article, copper of the richest description is found at a short distance beyond the Orange River, and lead has long been known to exist near the mouth of the Van Staaden's River in the district of Uitenhage; and there is little doubt that if scientific persons were sent out, resources of a most important kind would be found in this great field for investigation.

MORTALITY TABLE,

For the week ending June 13, 1846.

Causes of Death	Total.	Average of 5 summers	Average of 5 years
ALL CAUSES . . .	821	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	121	162	188
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	86	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	152	155	157
Diseases of the Lungs, and of the other Organs of Respiration	237	271	294
Diseases of the Heart and Blood-vessels	27	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	75	65	72
Diseases of the Kidneys, &c.	11	7	7
Childbirth, Diseases of the Uterus, &c.	14	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	8	6	7
Diseases of the Skin, Cellular Tissues, &c.	2	1	2
Old Age	39	60	67
Violence, Privation, Cold, and Intemperance . .	41	25	26

No. 352. SUMMARY JUNE 27.

PROGRESS OF MEDICAL SCIENCE

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of 15*th June*, 1846; M. BRONGNIART, V.P., in the Chair.

ANAPLASTIC OPERATIONS ON THE URETHRA OF MAN, BY M. JOBERT.—Recent fistular passages of the urethra, resulting from phlegmonous inflammation, may be cured readily by granulation, assisted with the introduction of permanent catheters; as to chronic ulcerations, the cure is often only apparent. M. Jobert has witnessed several cases illustrative of this assertion; amongst other that of an Italian who entered hospital several times for the treatment of a urethral fistula, and who was to all appearance cured after each of his visits to hospital. The patient having ultimately died of another malady, post-mortem examination showed that a minute urinary fistula was present, through which the urine was filtered into a sac, whence it returned into the urethra. With regard to perineal fistula, even in a state of induration, the twisted suture has, in M. Jobert's hands, produced complete cure, when coupled with excision of the cartilaginous passage; but in all cases the surgeon of the hospital St. Louis finds it indispensable to have recourse to catheters placed permanently in the bladder. Autoplastic operations are necessary for the obliteration of loss of substance in front of the scrotum; but in M. Jobert's opinion, incision of the perineal urethra is of no advantage and does not prevent the urine from flowing into its usual channel. In order to appreciate fully the opinions of M. Jobert on this subject, it is necessary to know that, in 1841, Drs. Ségalas and Ricord received from the institute a divided prize for a new plan of treatment of urinary fistula. The method proposed by these gentlemen proved successful in several cases which had resisted various operations, and presented as a leading feature the incision of the urethra in the perineum previous to suture of the fistula. The surgeons whose names we have mentioned, were led to adopt this measure from having remarked that agglutination of the lips of the fistula is almost always prevented by the filtration of a small quantity of urine between the walls of the urethra and the catheter; to obviate this cause of failure they resolved upon deviating the course of the urine from its natural channel, by opening the urethra in the perineum, and placing through this artificial orifice a short caoutchouc tube in the bladder. By this operation, performed some three or four days before any attempt at closing the fistula in front of the scrotum, the success of the plastic operation becomes much more probable, union not being interfered with by the contact of urine with the sutures. When cicatrisation has taken place—i. e., after a fortnight or thereabouts, the perineal catheter was removed, a long catheter being substituted, occupying the entire length of the urethra, and the wound of the perineum healed with the same readiness as the incision made for lithotomy. The correspondent of the *Medical Times* had, when attached to the hospitals of Paris, three opportunities of witnessing the operation, and in all three success was complete. M. Jobert proposes to treat the deformity peno-scrotal fistula, by single plastic operations, assisted by the permanent catheter; but when it is recollected that this method is very frequently unsuccessful, and that failure is always followed by an increase of the fistula, due to the excision of the lips necessary to suture, the safer though more complicated operation will in all probability be preferred.

ACADEMY OF MEDICINE.

Meeting of June 16*th*, 1846; Dr. ROCHE in the Chair.

THE STEREOSCOPE.—M. Cornay presented to the Academy of Medicine the instrument he has invented for the purpose of recognising by the production of sound the presence of vesical calculus. Professor Velpeau remarked, that on this point of diagnosis inventors had generally remained beside the question. The difficulty was not to hear the sound produced by the contact of any instrument with the stone, but to touch the calculus when it does exist. If, after numerous examinations, a calculus in the bladder has remained undetected, it is only on account of its position, which prevented it from coming into contact with the instrument of exploration, and not because the sound produced was not propagated to the ear of the observer. A long time since, besides, an instrument calculated to answer the same purpose as the stereoscope, was proposed by M. Moreau de Saint Ludgére.

THE PLAGUE.—M. Poiseuille read in an inaudible tone a long discourse on the subject.

At four the Academy formed into committee in order to hear the report of the section of Operative Surgery on the candidates to the vacant seat.

HOTEL DIEU.

CLINICAL LECTURE ON DIAGNOSIS OF DROPSY. BY PROFESSOR ROSTAN.

We will limit ourselves to the history of effusions in the cellular tissue, or into serous cavities. These two forms of disease have of late been studied in a much more physiological spirit than formerly; some years since, they were often looked upon as idiopathic disorders, now they constitute only a symptom, or outward manifestation of the lurking evil, which it is the interest as well as the duty of the practitioner to detect. This tendency to seek for organic lesions, in complaints hitherto deemed essential, is a characteristic feature of our age; you will find it has been applied to many other maladies besides dropsy, and that a new light has been shed by it upon the history of the obscure symptoms of paralysis.

The organic changes on which dropsy depends are very numerous, and may either be local or general. Simple alteration of the blood may produce it—a diminution of some of its solid elements, is even looked upon by some authors as constantly accompanying dropsical effusion. Professor Andral is of opinion that in all cases the albumen of blood is diminished in quantity; this is possibly a little exaggerated. We have met with it even in cases in which no morbid condition of the circulating fluid, except plethora, could be looked upon as a producing cause. We were once consulted by a young student in divinity, who was suffering from anasarca; he was a rigid observer of the rules of celibacy of his order, and on examination we could find no cause to the dropsy, but a state of excessive plethora. We advised him to abandon the study of divinity, and a very few weeks freedom from monastic regulations restored him altogether to health. Dropsy is more frequently produced by anæmia; but there exist some cases of effusion in which no organic lesion whatever can be detected in the solids of the body, or in the circulating fluids; thus, we have seen a case produced by a sudden arrest of perspiration, a bucket of cold water having been dashed over the body of a young person, who was at the time in a state of extreme heat; but such cases are extremely uncommon; the most numerous, by far, arise from some organic cause. One of the most frequent alterations by which dropsy may be produced, is an obstacle to the circulation. In a memoir of M. Bouillaud, formerly published in the *Archives of Medicine*, the mechanism by which compression of the veins produces effusion, is thoroughly explained. The learned professor has the merit of having again brought into notice a mode of production, which had been almost forgotten since the days of Morgagni and Boerhaave. In our opinion it is immaterial whether the obstacle exist in the arterial or venous system. The result, serous effusion, will be the same after a more or less prolonged interval. Disease of the lung may also produce œdema of the extremities—an occurrence which Chaussier explained by the diminution of pulmonary exhalation. We have often seen anasarca occur during the last stage of consumption.[1]

Dropsies often recognise disease of an abdominal viscus for this cause. The renal complaint, commonly called Bright's kidney, had been imperfectly understood before the researches of the distinguished physician who has given his name to the malady. Affections of the liver producing embarrassment of the portal circulation, generally occasion in a short time effusion in the abdominal cavity. We find also in that region tumours which are capable of producing dropsy by a double mode of action, viz., by pressure on the large vessels, and by the change they occasion in the constitution of the patient, and the composition of his blood.

We have heard it said that peritonitis never brings on dropsy; the remark applies only to the

[1] We were not a little surprised to hear this obsolete opinion quoted by the learned professor. A new and far more satisfactory theory has been brought forward by Dr. Bouchat, in his researches on "Phlebitis of the Extremities, consequent upon Chronic Disease." Paris, 1845.

acute form; in general, it is not so in chronic inflammation of the peritoneum.

The diagnosis of peritoneal dropsy is not in general accompanied with difficulty—percussion readily distinguishes the tumefaction from peritonitis—and the presence of fluctuation prevents the possibility of the disease being mistaken for a solid enlargement. It is not always very easy to ascertain whether the case is one of encysted or ovarian dropsy, or of peritoneal effusion. In the former, however, the dulness may generally be circumscribed by a curved line corresponding to the tumour, and therefore concave inferiorly, in diffused dropsy, the reverse is the case. The dulness occupies the sides and middle of the abdomen, and is limited around the umbilicus by a curve, which is concave superiorly. The history of the case must often be called in to assist the diagnosis. Dropsy of the ovary begins on one side of the hypogastric region, and increases the antero-posterior diameter of the belly. Whereas, peritoneal dropsy first occupies the dependent parts, and enlarges the transversal dimensions of the abdomen.

But it is not all to have ascertained the presence of peritoneal effusion. You must then, Gentlemen, endeavour to detect its organic cause; chlorosis you will know by the characteristic paleness of the patient, palpitations of the heart, carotidian souffle; and even then you may still remain in doubt, if the dropsy may not be due to cirrhosis—a much rarer affection than anemia—but marked only by negative characters. Plethora—disease of the heart—of the lungs—should be sought for with the greatest care.

The abdominal organs must then be one after the other examined—the kidneys, in particular, the secretion of which must be tested with heat and acids. We may say, incidentally, that too many degrees have been admitted in the study of the changes of the kidney, in granular disease. M. Rayer admits no less than six. As to cirrhosis, we have already stated that most of its symptoms are of the negative order. The changes of the liver in this complaint have been generally referred to three periods:—In the first, the size of the viscus is unchanged, the hepatic texture is yellowish, and marbled over with large, irregular red streaks, between which can be discerned a considerable number of rusty coloured corpuscles, analogous to indurated fat. In the second period, we find the liver atrophied and deformed; its surface is irregular and rough, and its tissue formed of tightly compressed, round, and variously coloured granulations; the vessels are sometimes obliterated. In the last and third degree, the liver is small, dense shrunk, and irregular, in shape; the colour is dark, and a greenish gelatinous fluid is occasionally met with in morbid excavations of the viscus. The diagnosis of this disease, during life, is always extremely difficult, and the malady is more generally guessed at than, properly to speak, diagnosed.

THE SPAS ON THE BANKS OF THE RHINE, BY PROFESSOR TROUSSEAU AND DR. LASÈGUE.

France possesses upwards of eight hundred mineral sources, and every day new and important well are discovered, but they attract little or no attention. Not so in Germany. If, at a few miles from Frankfort, Munich, or Darmstadt, a spa like that of Enghien or Passy were discovered, a thousand writers would celebrate its virtues, speculation would erect splendid hotels, perhaps even a free attraction would be offered to the bathers in the charms of the gaming table, and fashion would for ever establish the reputation of the new fount. The sceptical turn of the French mind fully accounts for this; what other men are easily induced by habit to believe, is usually rejected in France, and the consequence has been that scientific indifference in this country is following rapidly in the wake of religious and political indifference.

In Germany the tendency is quite opposite. Germans take all things seriously to heart; with the most elevated philosophical speculation they harbour the most dreamy flights of imagination; with the most elaborate and severe literary productions, they mix up the most incredible looseness of style and thought. In politics and religion they show a reckless temerity, and at the same time a degree of simple credulity which belongs only to the golden age; and yet, when we have become acquainted with many Germans, it is difficult not to love them. We are captivated by their intelligence, charmed with their simplicity, seduced by their kindness, and it is really hard to say if they have much to gain from the general movement of fusion which now-a-days draws nations towards each other as much as they were only lately separated, by the fierce demon of war.

In both countries medical science has partaken of this double tendency of the mind. In France the standard of the most exaggerated Pyrrhonism has been raised; in Germany medicine has remained an art—a science—in some respects a dogma.

Pinel, with his dry spirit of nomenclature and classification, shook, in France, the ancient medical creed. Broussais, his follower, carried away with the torrent of his impassioned eloquence an entire generation. The Anatomical School, more correct, though less profound, armed with the deceitful appearances of accuracy founded on the charlatanism of statistics, achieved the work of destruction, and crushed even the seeds buried under the ruins of overturned doctrines. Therapeutics have, however, at present resumed, in France, the place from which they had been forcibly expelled, and the discarded faith is beginning to flourish once more. In Germany we find the old therapeutic tradition standing, like those often insignificant ruins which are, by common consent, admired on the banks of the Rhine, and although the progress of chemistry is, in a great measure, due to Germany, although their physicians are fully as learned as ours, they respect many superannuated opinions, which we are not, thank Heaven! on the eve of resuming. Most practitioners on the other side of the Rhine believe implicitly in the sudorific virtues of Borrago officinalis, and her sister, the innocent Comfry, enjoys with rice the reputation of curing fluxes and hemorrhages, and we would not swear that lung-wort is not recommended with becoming gravity in pulmonary catarrh; at any rate, the uva ursi is still a solvent of calculi in Germany, and the night-shade, second in point of energy only to the potato, enjoys in that country astounding properties of stupefaction.

Let us not, therefore, be surprised when we find that the Germans attribute exaggerated virtues to their spas, the chemical composition of which they are well acquainted with. In France we are most shamefully ignorant of the nature and properties of German waters, and this ignorance is the cause of very fatal results. Thus, Wiesbaden, Hombourg, and Ems are beneficial to gouty patients. Rheumatism is relieved at Aix, in Savoy, and Wiesbaden. Uterine and thoracic complaints are often cured at Ems; and yet Wiesbaden, Hombourg, and Kreutz nach will cure gouty subjects who would die at Ems or Carlsbad, and these two spas would, in some cases of gout, be advantageous to patients, who would probably lose their lives at one of the other three watering places, because it is not a matter of indifference to prescribe so strong a tonic as the chloride of sodium, in lieu of so powerful an alterative as the bicarbonate of soda. At the same time that we fully acknowledge a just degree of confidence in the efficacy of mineral springs, we cannot altogether refuse listening to our judgment, and accept the singular pretensions of most writers on the spas.

Section 1.—*Of the Specific Properties of Mineral Waters.*—In the study of this arduous question, we find it necessary to divide the specific properties of the wells into two classes:—Those which naturally result from their chemical composition, and secondly, those artificially produced by the mode of exhibition. Perhaps a third division ought to be made with regard to atmospherical conditions, and change of diet and habits.

Supernatural virtues in any mineral waters we will not defend; indeed, it is rather surprising at a period when physiological and geological studies have become familiar to the public, still to meet on the subject of mineral spas with such prejudiced ignorance as we find every-day displayed. What are must be attributed to the mineral soluta in appreciation of the efficacy of the waters?—and does the identity of composition of two sources imply the identity of their therapeutic action? Such are the two most important questions relative to the first part of the present section. First of all we may say that no two mineral sources are perfectly identical in composition. When the differences are trifling in quantity, they concern the chemist, and not the physician. If this assertion were not admitted, how could we ever prescribe opium? Malwa, Algeria, Constantinople, Smyrna, Egypt, send us opium, but the produce of each soil is not absolutely identical with that of the others: they do not contain the same quantity of caoutchouc, salts of potassa, or lime, nor even the same amount of morphia. Sydenham's laudanum is certainly very different in composition from the laudanum of Rousseau, but the physician takes into account only the opium they both contain. In so doing, he is right. Compare Hombourg, Nauheim, Soden, Kissingen, Kreussnach, Wiesbaden, and you will find less difference between their waters than between laudanum and tincture of opium, which we look upon, therapeutically speaking, as identical. Consequently, among the mineralising principles contained in the water, those only are really efficient which are present in notable proportions. The others may be safely neglected. We may say that this truth is now perfectly demonstrated by medical observation. With the same condition of exhibition, with the same method of treatment, it is possible to establish, according to the nature of complaints, a general classification of the principal spas—slight differences of chemical composition introducing no appreciable modification in their therapeutic action. Thus, sulphureous waters at the temperature of the body, act favourably upon diseases of the mucous membranes, cutaneous affections, and suppurating ulcers. Ferruginous spas cure chlorosis, anemia, passive hemorrhage, and barrenness from debility. In the treatment of gout, plethora, gravel, diabetes, and liver complaint, alkaline wells are beneficial. Saline muriatic sources relieve chronic disorder of the digestive organs, dyspepsia, atonic gout, passive catarrh, and scrofula.

As to the choice of the particular well, much must depend upon the mode of administration. As to the repute or disfavour of certain spas, it would be a piece of scientific simplicity to seek for its cause, not that a cause does not exist, but that it is entirely out of the reach of the physician. Thus, an illustrious princess is sent to Ems for the treatment of some nervous affection. She was thin, and deeply debilitated. Society, which judges of the existence of consumption from the external conditions of the patient, had condemned her to die. She recovered, and that single case has been sufficient to establish the reputation of Ems as an infallible resource in thoracic disease. It is in vain that M. F. and M. Döring, the physicians of the baths, have protested against this singular opinion; the world would not be convinced, and had not the two gentlemen above mentioned been men of delicacy and honour, Ems would have, ere this, ruined all the other watering-places on the continent where it is customary to send tubercular patients.

The temperature of the waters is a question not to be neglected in the study of their properties; it modifies their chemical composition, and is in many instances the true agent of therapeutic action.

But when the physician has recommended his patient to such or such a watering-place, the case passes into other hands, and it is therefore necessary to make a particular study of the mode of administration of the waters at each place, in order to insure to the sufferers the full benefit of their use. The mode of exhibition is so important an assistant, that it is often the whole treatment. What are the mineral treasures of the peasant of Graefenberg when he prescribes with satisfactory results? Where are his atoms of iodine, his chlorides, his thermal springs? He has none. All depends upon the method. In the valleys of Switzerland, on the Rhine, within the smoky precincts of London or Paris, suppose that to-morrow a physician endowed with more wit than honesty were to apply acidulated or slightly sulphureous waters, according to this method, the miracles of Graefenberg would be equalled, if not surpassed.

Sect. 2.—If we take into account the mineral principles contained in appreciable proportions in the waters, they may be divided into alkaline, ferruginous, saline-muriatic, and sulphureous. This very simple classification would be insignificant for the chemist; it is quite enough for the physician.

E. 1848. Hospital.

Undoubtedly, if in practice we were accustomed to prescribe the bicarbonate of soda, the chloride of sodium, iron, and sulphurets in the same proportions as they are contained in these four varieties of mineral waters, far more important results would be obtained than can be foretold.

A. Mineral alkaline waters.

Ems.—Schlangenbad.—Ems is situated on the northern limit of the Duchy of Nassau, at a few leagues from Coblentz, from which it is separated by the Rhine. Ems occupies a valley open only to the western winds, and its climate, both damp and warm, is more temperate than that of the neighbouring localities. Many patients remain during the winter. More than twenty springs exist in the vicinity, but three only are exhibited to the patients: these are the Kesselbrunnen, Krœnchen, and Fursten-brunnen. Their temperature varies between 29 and 46 centig. (77 to 114 deg. Fah.) 1000 grammes of the water contain two grammes of bicarbonate of soda, two decigrammes (four grains) of bicarbonate of lime, a few centigrammes of sulphate of soda and chloride of sodium, and some vestiges of iron. The carbonic acid evolved from 1000 grammes (2 lbs) of water is equal in weight to thirty-nine or forty centigrammes (seven or eight grains) and in volume to twelve cubic inches, at the temperature of 43·8 centigrammes (or 110·2). The water is clear, transparent, and is taken in the morning, before the first meal, in doses varying from two to eight tumblerfuls. The baths produce only very trifling eruptions on the skin their therapeutic action shall be noticed hereafter.

Schlangenbad presents waters more analogous to those of Ems, from the nature of the dissolved salts than from their quantity; 30 centigrammes (six grains) of carbonate of soda are found in every litre of water.

Effervescent Ferruginous Spas—Schwalbach Spa—Schwalbach is situated also in the Duchy of Nassau; the air is sharper than at Ems; the three sources are effervescent and very pleasant to drink; they contain in 1000 gram. of water 30 cent. (six grains) of carbonate of iron, and extremely small quatities of chloride of sodium and sulphate of soda. This analysis is probably erroneous, few ferruginous spas containing more than a grain or a grain and one-fifth of iron to a litre of liquid. The Strahlbrunnen is the most frequented of the sources, and the Weinbrunnen produces the same effects. Their use is more active, but less pleasant than that of the newly discovered fountain christened "Pauliness" by the princess. In no ferruginous waters of Bohemia or Germany is the unpleasant flavour of the iron so well concealed by carbonic acid as in those of Schwalbach.

DAN. M'CARTHY, D.M.P.

Spain.

The following case of "*Living Entozoa in the (Human) Eye*," has been communicated, by a Spanish surgeon, named Carrera, to the editors of the *Boletin de Medicina*, in consequence of an article on the discovery of living entozoa in the ear and frontal and maxillary sinuses, having appeared in a preceding number of that journal. We are great advocates for the most rigorous precision in scientific language; and, in this spirit, question the propriety of designating the animals, detected in the present case, by the term, *entozoa*; which, as that term indicates, are developed, and continue to exist, only in the interior of other animal bodies. Still less, are they entitled to the name of *worms* or wormlets (gusanos, gusanillos) conferred upon them by the Spanish writer: since they were obviously the larvæ of some dipterous insect, probably belonging to the *Muscidæ*, or Fy-family. They, in fact, correspond very nearly with the description given, by Joerdens, in his rare and valuable *Entomologie des menschlichen Körpers*, p. 151,—of the larva of *Muscidæ*, "white, with black points on the head;" and were probably those of *Musca meteorica*, of Linnæus,—*Anthomyia meteorica*, of modern entomologists,—an insect which is represented, by Joerdens, as in sultry summer-weather, pursuing man and his domesticated animals, across the fields, and grievously infesting their *eyes* and ears.—P.

In the beginning of July, 1839, a man, aged twenty, complained of severe pain in the left eye; first experienced on the evening of the preceding day. It had encreased so as to destroy sleep, and render him unfit for work. By common observers nothing unnatural was perceptible in the eye. But when carefully examined by the surgeon, Carrera a minute red point was discovered in the superior and lateral part of the sclerotica, towards the internal canthus: it could only be seen by elevating the (superior) eye-lid, and directing the patient to look towards his nose. A suspicion was now entertained of the presence of some foreign body in the sclerotica. Gentle friction of the eye-lid neither aggravated, nor relieved, the pain; but, on a second examination of the eye-ball, some minute white points were observed; which disappeared with incredible rapidity, above the cornea. On repeating the friction, the presence of a number of "worms" was clearly made out, in the part affected with pain they were brought down by the friction; but, on elevation of the eye-lid, instantly returned to their original site. With a view of relieving the patient's sufferings, and obviating the mischievous consequences which might result to the textures of the eye, from the protracted presence of these animals, some drops of a solution of one grain of aloes and one grain of opium in a drachm of almond-oil, were instilled into the eye, with the precaution of closing it for a moment, and gently moving the eyelid upon the ball.

Upon again exposing the organ, a great number of "little worms" was distinguished; traversing it, with great velocity, in all directions. In order to destroy them, the instillation (of the medicated oil) was repeated; but produced such a profuse secretion of tears as marred its efficacy, and defeated the object of the application.

By means of a probe covered, at the point, with oil, thirty-nine of these minute animals were successively extracted. Almost invisible whilst in the eye, they exhibited, immediately after extraction, the diameter of a hair, and length of half a line. They were "*white, with a minute black point on the head.*" An anodyne cataplasm was subsequently applied over the organ.

Next day, the pain was mitigated; and a sense of weight and formication only remained. Light, previously intolerable, could now be admitted to the eye, without inconvenience. After thrice repeating the introduction of the medicated oil, thirteen more of the "worms" were removed, of the same figure and hue as, but three times larger than, those of the preceding day. On the following day, the patient suffered neither pain nor inconvenience; but continued, for some days, the employment of the drops.

It is probable that, in this case, the pain had been coincident with the development of the animals from the ovum. These ova must have been deposited in the internal angle of the eyelids by some fly (mosca); for the man acknowledged that, on the day of the occurrence of the pain, he had been sleeping, exposed to the sun's rays.

The following case, possessing, in our opinion, considerable interest and value, as a contribution to pathological anatomy, has been transcribed from one of the latest numbers, which we have been able to procure, of the same Spanish *Boletin de Medicina, Cirujia y Farmacia*.—P.

Case of Tumour of Neck: consequent on an affection of the Spinal Marrow, the result of Immoderate Sexual Indulgence.

A cavalry-soldier, of nervous temperament, but good constitution, had never suffered from illness, until, at the age of eighteen, he entered the army.

At that period, October, 1837, he contracted a syphilitic taint. The principal result of this was three bubos, which suppurated, and cicatrized, in forty-five days, under the antiphlogistic treatment, aided by some doses of mercury administered internally.

From this time, he continued quite well until February, 1842; when his constitution was greatly impaired by excessive venery. He complained of weakness and loss of appetite; and assumed an hypochondriacal character which he had never previously exhibited.

He was now attacked by obstinate jaundice; which continued until June; when the cold bath was employed. Severe pains in the humero-cubital articulations, vertigo, and (a sense of) weight in the head, were the result.

In this state of health, which resisted all medical treatment, the patient repaired, in August, to the baths of Trillo; where he drank the waters for three days, and bathed nine times, without relief.

In September, he rejoined his regiment, and was obliged to travel on horse-back; as not being able to bear the motion of a carriage.

September 11.—He was admitted into the hospital; exhibiting the following symptoms: Extreme weight in the head, and vertigo; and pains in the joints; a tumour, in the nuchal region, of the volume of a small orange, possessing little elevation and a broad base, indolent, without sensible alteration of the colour of the integument, and completely impeding the movements of the head. Various soothing balsamic liniments were employed to the joints, and repeated applications of leeches, and emollient cataplasms with laudanum. Some purgatives were also prescribed in addition to the use of laxatives.

October 1.—Same symptoms continued; with pains in the swelling, and increase of frequency of the pulse. Employment of leeches and anodyne cataplasms, with the other remedies, was continued for six days, consecutively. During this period, gastric symptoms presented themselves, with constipation of the bowels.

Slight relief was now obtained from frictions with antimonial ointment. Resolutives, the iodine ointment, and blisters, were tried without effect. On the 24th of October, a gangrenous eschar shewed itself upon the skin covering the centre of the tumour. Fomentations with *agua clorurada*—chlorinated water, or, perhaps, solution of chloride of lime?—and with camphorated decoction of cinchona, were prescribed, and blisters applied to the lower limbs; but the patient, gradually sinking, died on the 27th. During the whole time of his residence in the hospital, his appetite had been nearly extinct; rejecting everything except milk. Towards the close of life, his pulse had been much accelerated; and he had been troubled with dysury and paraplegia.

DISSECTION.

Nothing, elucidatory of the nature of the disease, or the cause of death, in the three great (splanchnic) cavities. The fatal result had obviously been determined by the cervical tumour; whose vertex corresponded to the spinous process of the second cervical vertebra, which was softened. There was a large extravasation of serum in the vertebral canal; an infiltration of pus and sanies through all the cellular texture of the posterior region of the neck. The spinal marrow presented, in the extent of about two inches, at its superior part, a yellow colour, and considerable augmentation of volume.

REFLECTIONS.

The fatal affection of the spinal marrow, in this case, is not referrible to the syphilitic taint from which the patient had suffered five years previously to the appearance of the tumour in the neck. It was, doubtless, the result of inordinate indulgence of the sexual passion; and serves to illustrate the frequent occurrence of affections of the spine from excessive masturbation. The softened condition of the second cervical vertebra shews that the osseous system suffers from abuses of this kind; and it is probable that caries would have ultimately taken place, if the principal disease of the medulla had allowed a sufficient prolongation of the patient's life. From this case it may, also, be inferred that the evils, resulting from inordinate exercise of the sexual organs in copulation, are identical with those inflicted by their solitary abuse.

The injurious effect of the improper use of the cold bath is, in this instance, especially deserving of notice; nor were the waters of Trillo, although more correctly indicated, productive of any result except that of accelerating the development of the disease.

Italy.

GALVANISM IN AMAUROSIS: BY M. FINELLA.—In three amaurotic patients submitted to the action of galvanism with much benefit, M. Finella states that the positive pole of the battery acted more efficaciously than the negative; and that, however, intense the current might be, the contact of this pole with the cornea produced no opacity or other alteration; neither did it cause headache,

noise in the ears, nor vertigo. He also states that the more profuse the lachrymation which ensues on galvanism, the more favourable the effect of the remedy on the amaurosis. The same favourable prognosis may be deduced from the perception of sparks by the patient. In fact, according to the author, these two signs united, furnish the surgeon with the most certain means he can desire, on which to rest his prognosis of the probable issue of the disorder.

Tumour of the Neck Dispersed by Acupuncturation.—A young woman, during six months, suffered from a small tumour on the right side of the trachea, which appeared after a violent effort she made to lift a weight, at the same time that she strained the muscles of the neck by turning her head. She did not experience at the time, however any painful sensation, but the development of the tumour commenced immediately, and continued till it had acquired the size of a nut. Friction with iodine ointment having produced no effect on the disease, it was determined to apply the acupuncturation, which was repeated on five occasions every second day, at first with two, then with four, five, and seven needles. A painful inflammatory swelling of the disease came on, which caused the operations to be left off for a week, and rendered poultices necessary The swelling having subsided, the acupuncturation was re-commenced first with three and four, and once only with five needles. When their introduction caused little pain, they were plunged deeply passing through and through the tumour. When their introduction was painful, they were passed as far as the centre of the tumour only. They were generally allowed to remain an hour and a-half, or two hours at the most. Two or three drops of blood generally followed their withdrawal; under this treatment the tumour diminished by degrees and at length entirely disappeared.

Entozoon in the Chambers of the Eye By M. Alessi.—A magistrate, aged thirty, applied to M. Alessi, in the month of July, 1814, to consult him for keratitis, from which he had suffered for nine months, and to which chronic vascularity of the conjuctiva was added. The inflammation, which appeared and disappeared irregularly, had produced several nebulæ of the cornea, and a constant lachrymation and weakness of vision. This disease had been attributed to various causes by different practitioners, and had been submitted to various kinds of treatment. On examining the eye M. Alessi recognised keratitis affecting all the layers of the cornea, together with slight muddiness of the aqueous humour. By continuing the examination with the aid of a lens, he saw a worm pass from the posterior into the anterior chamber. Seen with the naked eye, this worm appeared to be about two lines and a-half long. It was of a dirty white in its two inferior thirds, and fusiform; its superior third was of a milky colour. From the last portion four processes grew, one inferiorly, the shortest, one superiorly, the longest, and two laterally. M. Alessi gives no opinion whether this animal approached sufficiently near to cysticercus to pass under that name. It had, however, two opposite motions; when the superior appendages approached the inferior separated, and *vice versa*. It remained two or three minutes in the anterior chamber, and then retreated into the posterior, where it remained behind the lower edge of the iris for some time; returning into the anterior chamber, it lay against the outer edge of the iris. The chief cause of the ophthalmia having been thus discovered, M. Alessi was afraid to attempt to destroy the entozoon, according to M. Gescheit's plan, by exciting severe inflammation in the eye. In the present case inflammatory disease already existed, and its increase would not have been without danger. With regard to the extraction of the worm, by an operation which had been done by Sœmmering, M. Alessi feared he would not be able to effect it in this case, on account of the free motion present. After having reflected on the indications which this rare case presented, M. Alessi determined first to combat a syphilitic taint which existed in the patient's family. This was done by means of anti-syphilitic treatment during forty days. M. Alessi then prescribed the application of three blisters, each two inches long by one wide. The first was placed over the eyebrow, the second on the temple near the orbit, and the third near the inferior border of the orbit. These blisters were dressed night and morning with an ointment containing equal quantities of calomel and santonine. The worm was, shortly after this treatment, deprived of all motion, and in less than forty days it was entirely absorbed. The keratitis and conjunctivitis of the eye of course soon disappeared, and the functions were completely restored.

America.

Aneurism by Anastomosis. — Dr. Warren relates, in the *American Journal of Medical Sciences*, a case of aneurism by anastomosis, in a healthy man, aged thirty-three. The tumour was situated on the forehead chiefly below the hairy scalp, and a little to the right of the median line. It was soft, pulsating, and irregular, about three inches in diameter, and from a half to three-quarters of an inch in thickness. It was red in colour, and became redder when the patient's circulation was excited either by mental emotion or exercise. It seemed to consist of coils of vessels, was easily compressed, and on the removal of the pressure immediately swelled again. Numerous pulsating vessels entered it from different directions, chiefly on the right side. Some of these could be distinguished as vessels described by anatomists. The temporal artery on the right side, which was much enlarged, and tortuous as far down as the ear, entered the tumour, together with branches from the temporo-frontal, and the facial arteries. The left temporal artery, which was nearly as large as the right, and the left facial artery, with their accompanying veins, formed a vascular tumour at the root of the nose. The veins themselves were enormous, and passed down from the tumour on either side of the nose, partially obscuring the commissures of the eyelids. The whole scalp near the tumour was full of pulsating vessels. On compressing the temporal arteries, the pulsation in the tumour was much weakened, and pressure at the same time on the facial arteries stopped it altogether, and much lessened the size of the tumour. This tumour began sixteen years before without any known cause, by a small reddish spot on the right side of the forehead. It had gradually increased till lately, when its increase had been more rapid, especially within the last fortnight. There was an occasional throbbing of the carotid arteries, particularly that of the right side. The patient was also subject to distressing headaches, accompanied with increased action of the blood-vessels of the tumour, and of the head generally. This vibratory action of the arterial system of the head, neck, and upper extremities, was quite remarkable. He was incapacitated by it from all active exertions, and was ready to undergo any operation that promised to relieve him. It was evident that the morbid action would eventually involve the whole scalp in a mass of dilated arteries, with, perhaps, the vessels of the eyelids, the face, and the interior of the mouth, and the patient's life would be constantly in danger from the effects of a rupture of the tumour. An operation of some kind seemed therefore indispensable. Ligature of both carotid arteries was deemed likely to be of little service. As the tumour was situated at a distance from those vessels, and as the ophthalmic artery was unusually dilated. To ligature the chief vessels entering the tumour would have been a very tedious and probably also an unsuccessful proceeding, as their number was very great, and there were very many small vessels in which it would have been impracticable. The tumour was too large to be destroyed by caustic with safety. Dangerous hemorrhage would have followed any attempt at excision, and it was too large and too much connected with the bone to admit of ligature *en masse*. On the 31st of October it was observed that by compressing on the right side the temporo-frontal and two temporo-parietal arteries, and on the left side the continuation of the temporal artery through the frontal region, and the temporo parietal, the pulsations of the tumour appeared to be arrested, and its contents were readily expelled through the large veins, running into the facial vein. It was therefore determined to interrupt the circulation through the five vessels first mentioned, three on the right side, and two on the left. Instead of exposing and taking up these vessels in the usual way, Dr. J. C. Warren suggested that much time and loss of blood would be spared by passing needles under them. This was accordingly done, and the arteries were compressed by a ligature thrown over the needles in the form of a figure of 8. After this the pulsation of the tumour was much diminished. Venesection was performed, and the patient placed in bed with his head elevated. On November 6th the needles were removed. Very slight soreness had been experienced from them. The tumour was diminishing in size; the vessels constituting it appeared more flaccid and compressible, and the soreness and all the uncomfortable sensations connected with it were lessened. On the 12th the pulsations in the right and left temporal arteries still continuing, a needle was passed under each of these directly above the ear, after which the pulsation subsided, and also the general sense of beating about the head. On the 21st, in consequence of a slight bleeding from the wound of a pin inserted on the 16th, we thought it best to obstruct the vessels on the anterior, and on the internal part of the tumour, and passed pins in each of these situations. There was no pulsation in the tumour. On the 22d there was a sudden rupture of the tumour attended with considerable hemorrhage. Being hastily called to the patient, I passed two large pins at right angles with each other under that part of the tumour from which the hemorrhage was taking place. A ligature was carried around under the needles, and being tightened, the bleeding was effectually checked. On the 25th the pulse was natural, 75; the internal sensations were much improved; there was no vibratory motion of the arteries of the head, and none was discoverable in the tumour, though a pulsation still existed. A slight œdema extended from the tumour to the nose, and to the eyelids. Occasionally a drop of blood started from the needle wounds. On the 30th a vessel was discovered running from the left temporo-frontal artery across the left eyebrow, communicating with a branch in the angle of the eye on the right side, thence running up along the left edge of the tumour, till it reached its superior posterior border. It did not produce a pulsation in this part of the tumour, but, skirting along its edge for some distance as it did, there was a strong probability of its sending vessels into the morbid mass, thus tending to keep up the morbid action. The needles, which were inserted by Dr. Mason Warren on the 22d inst., caused inflammation and induration of the tissue in their neighbourhood, and were removed without hemorrhage. On the 1st of December a needle was passed under this vessel, and a ligature in the form of a figure 8 over it suspended all pulsation. On the 3rd of December two needles came away from the tumour without hemorrhage. There was no throbbing about any of the arteries of the head, and the carotid pulsated naturally. Two needles still remained, besides that passed on the 1st of December. The patient was tranquil, and sat up, which he had been unable to do on account of the throbbing produced by motion of the head. He felt well, and had a good appetite, which however was not indulged. On the 6th all pulsations were at an end, but the tumour still existed, although much diminished. Caustic potash was now applied freely, and repeated several times to different portions of the diseased mass. On the 5th of April a portion of the erectile tissue which remained at the upper part of the tumour was excised, one vessel only requiring ligature. After this a fulness was observed immediately above the supra-orbitar foramen. A triangular piece of the suspicious part was, therefore, cut out, and the supra-orbitar artery tied. In about a fortnight the wound was healed, and on the 20th of May the patient returned home in excellent health. Dr. Warren remarks on this case that the general treatment gave important aid to the local applications. The patient was kept very still, and for the greater part of the time in bed, with the head much elevated. His food was restricted to the smallest quantity, so that he was reduced for a time to a state of total prostration of the muscular power. During most of the treatment, if a small addition was made to his food, its bad effect was generally seen in the production of arterial vibrations and the recurrence of headache. Abstraction of blood, and the use of

purgatives were resorted to when necessary. Although erysipelas prevailed all around this patient, he was never affected by it in the slightest degree during an exposure of at least three months.

Extra-Uterine Pregnancy during which a Full-grown Child was Born.—Dr. Yardley relates, in the *American Journal of Medical Sciences*, an interesting case of extra-uterine pregnancy with retention of the fœtus fifteen years in the cavity of the abdomen, during which time the patient was delivered of a full-grown child. The following are the chief facts of the case:—The patient, aged forty-four, a patient of leucophlegmatic temperament, who had been exposed to much hardship, consulted Dr. Yardley in the early part of August, 1844, with feverish symptoms. She had a large tumour, with pain in the lower part of the abdomen, which she said had been there for years, and that it gave her little inconvenience. She refused to submit to the examination necessary to ascertain the nature of the swelling, and received some general antiphlogistic treatment. Towards the end of the year she became very much reduced by pain, irritation, and hectic fever, and early in January, 1845, a large discharge of pus took place per anum. This discharge continued at intervals, till July, when she said that small pieces of bone had come away, which, on examination, proved to be the bones of a fœtus. With some difficulty Dr. Yardley learnt the following particulars.—In 1830, soon after marriage to a second husband (the patient having been previously married without issue) she became pregnant; the catamenia were suspended; her breasts enlarged; and she had nausea and morning sickness as in ordinary pregnancy, but no unusual or anomalous symptoms. When near the term of utero-gestation she had a fall, which was followed by violent crampy pains in the abdomen, but not like the labour-pains which she suffered in her subsequent confinement, and there was no discharge per vaginam. A physician visiting in the neighbourhood was called to see her; he, however, made no examination, and, after directing an anodyne, left her, with the understanding that he was to be sent for if his services were required. He was not sent for; and though she suffered severely for several days, and was unable to leave the house for six months, yet she never had any regular medical attendant. She had no vaginal discharge for at least a year after this attack of pain, and at that time her catamenia returned; her health gradually improved, and early in 1834 she again became pregnant, and passed through the usual period of utero-gestation without the occurrence of anything unusual. The gentleman who attended her during her confinement states that on the 5th of October, 1834, she was delivered of a still-born male child, there being apparently a full sized infant of a former pregnancy extra-uterine, in the abdominal cavity. This caused some difficulty by its obstructing the passage of the child into the cavity of the pelvis. After she was delivered of this child, she became pregnant two or three times, and miscarried in the second or third month, but was not attended by a physician. Her general health, however, was very good, and she worked hard till August, 1844, a period of nearly ten years. On making an examination per rectum, the os femoris of a fœtus was found projecting into that cavity from an opening on its anterior surface about four inches from the anus; and on examining per vaginam, the uterus was found pressed against the pubes by a large mass (evidently a sac containing part of a fœtus), which filled up the posterior part of the pelvis, and pressed the vagina forwards. The os femoris and some of the small bones were removed, but it was evident that the soft parts of the fœtus were still firm, except where they were exposed to the air through the opening in the rectum. It was therefore deemed prudent to wait till decomposition had proceeded further. Dr. Hodge, of Philadelphia, visited the patient with Dr. Yardley, at intervals of two or three days, and at each visit, such portions of the fœtus were removed as could be separated from the main body without using imprudent force. During these operations, the patient became much exhausted, and appeared to suffer severely, particularly from the passage of sharp points of bone through the rectum. After each operation, and on the intermediate days, the sac was washed out by passing a flexible tube through the opening into the rectum, and injecting a large quantity of tepid water. Tonics and nourishing diet were also given to support her system. About the middle of August, inflammation and suppuration took place in the perineum, and some small pieces of bone passed through the opening by enlarging the aperture, an os ilium was extracted. After a little time the bones of the head were found to be separated, and were removed without much difficulty through the rectum. One of the thighs with the flesh on it was also extracted, together with the principal part of the spine united by its ligaments and muscles. During the passage of these large masses through the rectum, the abdominal muscles were called into action, and bearing down efforts similar to those of ordinary labour were produced. The process of removing from time to time such remains of the fœtus as could be extracted without injury to the mother, was continued for some weeks. A fluctuating tumour was also punctured through the rectum, giving exit to a quantity of bloody fluid; it contained no bones, however. The patient began to improve early in October, and the sac, in which no bones could be felt, seemed to contract, although there was a good deal of thickening on the left side of the rectum. Mildly astringent injections were now thrown into the sac, and the patient was encouraged to use exercise in the open air. From this time she rapidly regained her health and strength, and by Christmas she was perfectly well. The fistulous opening in the perineum had healed, and she was not conscious of any unnatural sensation in the pelvic region.

England

[The following are the only articles of interest to the profession in the last two numbers of the Lancet.]

Cæsarian Operation.—A married woman, aged thirty-eight, short, pale, and emaciated, with a narrow chest and small limbs, but without visible deformity, was admitted into the Vienna Lying-in Hospital, on the 7th of February, 1846, at seven o'clock in the evening, with strong and frequent labour-pains. The patient had been accustomed to poor living, and had gained her livelihood by shirt-making. On examination, it was discovered that the outlet of the pelvis was very much deformed, and the brim contracted; the membranes were ruptured; the vagina was hot and dry. The os uteri was dilated to the size of a shilling; and on passing the finger a little above its anterior lip, a laceration was discovered in the cervix, extending about an inch upwards, and about the size of a shilling in circuit. The patient complained of pain when touched about the neck of the uterus. The labour pains were strong and frequent, occurring every three to five minutes. The membranes had been ruptured some hours previously to her admission. This was her first pregnancy, and she had gone her full term. The patient stated that the pains had commenced about six o'clock of the same day, and in a quarter of an hour they had become so frequently repeated that her friends sent for a barber-surgeon, who came, examined her, discovered deformity, and said he must deliver her as rapidly as possible. He ruptured the membranes, and endeavoured to pass the whole hand into the pelvis. After continuing a long time in this practice (during a pain) he suddenly felt something give way. Professor Kleine, after making an exploration, said, that as the child was alive, and considering the presentation, which was a breech—the first oblique position—and from the laceration of the cervix, he decided on the Cæsarian operation. The woman was placed upon a table, in the recumbent posture, the shoulders being a little elevated. The bladder was emptied of its contents with a catheter; the knees were very slightly bent upwards, and the thighs a little flexed upon the abdomen, to relax the abdominal muscles. The Professor commenced an incision even with the umbilicus, but on the left side of the linea alba, which was carried gradually downwards, to within one inch and a-half of the symphisis pubis. The second incision was directed in the same manner as the former; the peritoneum being exposed, a small piece, corresponding to about the centre of the uterus, was taken up with the forceps, and gently snipped with a pair of scissors, so as to admit a director. The director being passed upwards, was cut upon, and the finger was now introduced and directed towards the pubes, the Professor cutting on it till it reached the extreme end of the abdominal wound. The same means were adopted to extend the wound upwards, when the uterus became visible. Slight hemorrhage came on as the rectus was divided, but was immediately stopped by the application of sponges dipped in ice-cold water. A little wine was now given to the patient. The uterus was large, and of a reddish-blue colour, the fundus extending an inch and a-half above the umbilicus. The incision was begun at its fundus, in the mesial line, even in height with the abdominal incision, and was continued so far downwards as to be within two inches and a-half of the symphisis, leaving the child enveloped within the amniotic membranes, which enclosed it. These were taken up by the fingers and torn through, and the Professor grasped the feet of the child and gently extracted them, the lips of the uterus and abdominal wound being well kept back by the assistants. As the feet and breech were being extracted, a violent labour-pain came on, the uterus powerfully contracting upon the head and shoulders of the child, which it held with great force for some few seconds. During the pain, the Professor discontinued all extracting efforts. The pain having ceased, the arms were drawn downwards, sweeping over the face, and extracted; and lastly, the head was brought out, but as it was passing out of the cavity of the uterus, another contraction took place, lacerating the organ at its lower portion, and extending the wound for at least three-quarters of an inch more. From this torn portion of the uterus considerable hemorrhage took place, so that the patient completely fainted. Some wine was again administered, which restored her. The iced water was now more frequently applied, and constant pressure was made. The divided vessels of the uterus could be well seen; their large, open mouths sufficient to admit a crow quill. During this hemorrhage, which lasted half an hour, the poor woman fainted three times, and the last syncope was so long, the pulse leaving the wrist, and the aspect becoming perfectly death-like, that serious apprehensions for her immediate safety were entertained. After the patient had been a little restored, the placenta, situated at the right side and posterior part of the fundus uteri, was detached, when the child, a fine healthy boy, was extracted. The woman being again quite restored, five sutures were passed through the rectus, integuments, and peritoneum, beginning just below the umbilicus, and continued to the symphisis nearly, with interstices of half an inch between each suture. Strapping plaster was covered over the whole wound transversely, and then, after the lapse of a quarter of an hour, the woman was carried into her room. The operation in all took one hour and a half, including the delay occasioned in restoring her when she fainted. One grain of opium extract was given to her afterwards. The next morning the patient appeared to be going on well, but during the following day a severe rigor occurred, which lasted half an hour. Vomiting supervened, and the patient died about forty-three hours after the operation. The post-mortem examination, upon removing the strapping, there was an escape of dirty-brown and very offensive fluid. The edges of the wound showed not the least sign of reaction. The incision in the abdomen was five inches and eight lines in length. The cavity of abdomen contained about two ounces of a dirty-brown reddish-coloured fluid. A portion of the small intestines, commencing about two feet above the cœcal valve, was covered by a thin, soft, reddish-coloured exudation, which united them with the uterus. The peritoneum covering these small intestines was highly injected, the injected vessels with their ramifications being beautifully seen. Liver, pale, soft, and easily broken down; size, natural. Gall-bladder, filled with a light yellow kind of fluid. Spleen, small, flabby, pale, and quite bloodless. Stomach contained a great quantity of a greyish kind of mucus. The intestines contained fluid, bilious-looking fæces; kidneys pale and flabby; bladder, collapsed and empty. The uterus, with its fundus, above the brim of the pelvis. The

edges of the wound had no appearance of any attempt at healthy reaction, but were covered with a dirty brown kind of secretion. That part of the uterus corresponding to the attachment of the placenta, had on it a dark, firm, fibrous-looking coagulum. The anterior part of the cervix, just above the anterior lip of the os uteri, had a laceration of the size of a shilling, or a little larger. The tissue of the fundus uteri was pale and flabby, and the whole organ enlarged. About the cervix it was thinner than in any other portion, and was highly suffused with blood. The vertebral column in the lumbar region was strongly bent forwards towards the pubis, and the fifth lumbar vertebra was in the place where the upper part of the os sacrum should have been—*i. e.*, a line drawn from the pubis at its centre, and passed backwards, instead of passing directly to the os sacrum, would have impinged about the middle of the body of the last lumbar vertebra. The os sacrum was more than an inch below its proper position. It was highly concave, considerably curved backwards. The whole of the pelvis was very much distorted; and obliquely, from the right sacro-iliac symphisis to the left ilio-pubic junction, measured four inches and four lines; transverse, four inches and eight lines. From the promontory of the sacrum to the corresponding acetabulum measured two inches and twelve lines. The aggregate diameter of the pelvis was only two inches and ten lines. From the left sacro-iliac symphisis to the left ilio-pubic junction measured two inches and five lines. The right ilium bent more inwards than the left, but both were of a spoon shape, that is, the crests of both ilia turned inwards, making them look very concave; the ilia were also very thin, and in parts quite transparent. From the point of the coccyx to the promontory of the os sacrum, one inch and a-half. Outlet: From the apex of the os coccyx to the arch of the pubes, three inches and two lines. From one tuber ischii to the other, two inches and one line. Breadth of the descending rami of the ossa pubis was one inch. At the junction of the rami of the pubes with that of the ischium, across to the opposite junction of the pubis and ischium, measured only six lines. Dr. Rigby's Midwifery, p. 187, gives some slight idea of the kind of deformity, especially that at the symphysis pubis. The child at the date of the report was doing well.

Fracture of the Sacrum impeding Delivery.—Mr. Gibson relates a case in which labour was twice impeded in the same patient by a fracture of the sacrum. The woman, aged thirty-six, had borne seven children, her labours having always been natural, when she was run over by a baggage-van, and sustained a severe injury of the pelvis. She afterwards became pregnant, and on the accession of labour, Mr. Gibson found the sacrum with its promontory projecting forward, and the antero-posterior diameter of the pelvis contracted. Upon examining externally there was a deep depression, in which almost the two hands might be buried, corresponding to the sacrum. In this case there could be no doubt that one of two operations should be immediately performed—craniotomy, or the Cæsarian section. Perforation was agreed on, but in order to accomplish the extraction of the fœtal head, it was not only necessary to destroy the brain and evacuate it, but to remove the parietal and the greater portion of the occipital bones. The delivery was completed in about an hour and a-half. Two grains of opium were given, and the case proceeded, with some slight uterine inflammation which was readily overcome, to a favourable issue. About five months after her recovery, she again became pregnant, but did not apply until within the ninth month of utero-gestation. At this late period, Mr. Gibson did not feel it advisable to induce labour, but to await the commencement of natural labour, which took place on October 1st, and proceeded slowly during the whole of that day. The os uteri being somewhat dilated and readily dilatable, without any advance, as in the preceding labour, the delivery was accomplished in the same manner as on the former occasion, and this time she recovered without one unfavourable symptom.

Retrogression of Science.—Amputation of the Leg in Disease of the Tarsus.—Four cases are reported by Mr. Holmes Coote in which amputation in the lower third of the leg was deemed necessary, and resorted to, by Mr Stanley. In the first case the patient, aged twenty-six, had been severely injured, two years before, by a heavy weight, which fell upon the left foot, and crushed three toes. Considerable swelling and inflammation ensued; the toes mortified and were cast off, but the foot never regained its natural size. When admitted, in 1844, under Mr. Stanley, there was a large and painful ulcer upon the dorsum of the foot, with thickening of the surrounding parts the patient was unable to bear upon the limb in the slightest degree. Every plan was ineffectually tried to bring the sore to a healing state, and at the end of six months, the patient, feeling himself hopelessly crippled, was anxious to have the foot removed. With a small amputating knife, Mr. Stanley formed an anterior and a posterior flap, and divided the bones about three inches above the malleoli. In the second case we are favoured with dates. The patient, aged thirty-one, a sufferer from rheumatism, stated, that two years before he experienced severe pains in the foot, which swelled, and became red: abscesses formed, which burst, and degenerated into fustulous passages, through which a probe passed down to bone denuded of its periosteum. August 2nd, 1845: The leg was amputated by Mr. Stanley immediately above the malleoli. Upon examination of the foot, it was found that the middle cuneiform bone, ulcerated upon its surface, and of yellow colour, was loose in a suppurating cavity, surrounded by the other bones, not materially diseased. April 28th, 1846: He came to the hospital for the purpose of trying the following apparatus.—A long leather boot, made to fit with great accuracy, receives the stump, and is attached to a circular leather strap with a buckle, above the knee, by a superior and an inferior lateral strap, united at the bend of the knee by a ring. This boot must be so constructed, that the weight of the body, in walking, shall press upon upper and lateral parts, and not upon the extremity of the stump; the rings in the lateral bands are for the purpose of allowing the knee to bend readily. To the extremity of the boot a foot is attached, in the instep of which is a common hinge, kept patent by a spiral wire spring. In the third case, a sailor, whilst walking barefooted, trod on a large nail, which penetrated two inches into the heel. He did not suffer much at the time, but severe pain came on afterwards. Some weeks afterwards an abscess formed in the heel, which was opened by the surgeon of the ship with immediate relief. Other abscesses formed about the heel, and burst, leaving fistulous passages, through which fragments of dead bone were discharged. When admitted into the hospital, September 5th, 1845, the left foot was swollen and painful; there were several fistulous passages, apparently leading to a cavity in the os calcis. The spot where the nail penetrated the heel was marked by a cicatrix; the foot was quite useless, and was never free from pain. He was kept quiet in bed; the foot was leeched, and all inflammatory redness was removed; no perceptible improvement ensued. On January 18th, 1846, the leg was amputated by Mr. Stanley. On examination, the cicatrix of the heel corresponded with a long fistulous passage in the os calcis, closed inferiorly by periosteum, and terminating superiorly in an abscess of the cancellous texture of the bone, its cavity of the size of a walnut; the posterior calcaneo-astragaloid articulation was destroyed by ulceration. The fourth case, that of a pale, unhealthy looking lad, aged seventeen. Pain in the right foot came on three years before admission into the hospital, and was followed by swelling and the formation and bursting of abscesses, leaving a fistulous passage over the astragalus, which led to denuded bone. He was admitted into the hospital March 11, and the operation was performed April 11. In this case the astragalus, thickened, yellow, and of dense, bony structure anteriorly, was ulcerated upon that surface opposed to the os scaphoides. The astragalus was most probably thickened, and rendered denser, by the inflammation caused by the disease going on in the astragalo-scaphoid articulation. *** Mr. Coote seems to consider it his duty to place before the public such surgical cases as reflect least credit on his former preceptors. In the first of these cases, it will be remarked, that the leg was amputated for an ulcer of the soft parts supervening on injury, in which "every plan had been ineffectually tried to bring the sore into a healing state." We are not informed what these plans were, nor is any description of the sore given beyond the fact that it was large and painful. The appearance of the parts on dissection is not mentioned. In the second case, the limb was amputated for a very circumscribed disease of a single superficial bone of the tarsus, which might easily have been removed by a much less severe procedure, with the advantage, too, of preserving the foot entire. In the third case the application of a trephine to the os calcis, and a little after care in dressing the wound from the bottom, would probably have prevented the necessity of amputation.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

By G. J. GUTHRIE, F.R.S., &c.

LECTURE VII.

Wounds and injuries of the throat and mouth implicating the carotid artery; Case of fatal ulceration of the carotids caused by a foreign body in the œsophagus; Staff-Surgeon Collier's case of wound at the angle of the jaw, penetrating into the mouth; Severe consecutive hemorrhage; Successful ligature of the common carotid; Mr. Mayo's case of hemorrhage from ulceration of the pharynx, Successful ligature of the right common carotid; Mr. Luke's case of hemorrhage from ulceration of the throat; Successful ligature of the left carotid; Case of cut throat; Wound of the internal jugular vein, and of the external and middle coats of the carotid; Consecutive hemorrhage; Ligature of the common and external carotids, followed by death from weakness; Staff-surgeon Maling's case of ligature of the common carotid for a wound of the throat; The external carotid should generally be tied in all cases of hemorrhage from the throat which cannot be otherwise arrested; The ligature of the common carotid should be a last resource; The consequences of ligature of the common carotid; Mr. Vincent's cases of paralysis following that operation; Sedillot's case of hemiplegia after ligature of the common carotid; Dr. Twitchell's case of sloughing of the internal carotid from a burn with gunpowder; Ligature of the injured vessel unsuccessful in arresting the hemorrhage; Success of compression; Dr. Warren's case of ligature of both carotids for erectile tumour of the lower lip and tongue; Treatment of wounds of the hand and foot, accompanied by hemorrhage; Wounds of the radial artery where it dips into the hand, Wounds of the ulnar artery; Case of wound of the ulnar artery near its origin; Ligature of the brachial; Failure of the operation in arresting the hemorrhage; Ligature of the ulnar artery; Remarks on the case; Wounds of arteries in bleeding; Case of wound of the brachial artery during venesection; Attempts to arrest the hemorrhage by compression; Ligature of the artery; Amputation and death; Circumscribed or diffused aneurism, aneurismal varix, or varicose aneurism, the result of wound of the artery in bleeding.

It is not possible in every instance to reach the wounded part of an artery without making greater sacrifices and without incurring greater dangers than are consistent with that prudence and discrimination which should distinguish an accomplished surgeon. Wounds and injuries of the throat and mouth, implicating the carotid artery, furnish the most prominent examples of difficulties of this nature, and the propriety of placing a ligature on the main trunk at a distance from the part wounded under these particular circumstances, must now be considered

Case 119.—A soldier, in the year 1805, complained to me of sore throat, difficulty of breathing, and uneasiness in his chest, which he said arose from certain blows received from the drill serjeant in consequence of his awkwardness No proof could

however be brought of the blows or of any ill-treatment, further than that he had been drilled for several hours daily to make him keep his shoulders back, but in vain. The fauces were slightly reddened. After a few days the throat became more inflamed, although not to any great extent, and he was utterly incapable of swallowing anything but liquids. This was followed by a ptyalism, as if under the influence of mercury, which induced me to tax the man with having made himself ill, but he would not acknowledge it, although I promised him a pardon on telling the truth.' He soon began to spit blood, of a light scarlet colour, but without any cough; and this increased in quantity daily, until at last the orderly informed me there was a coagulum in the bottom of his spitting-pot every morning, equal to six or eight ounces of blood. A day or two afterwards the blood began to pour out of his mouth so rapidly, that he sent for me. I arrived however only in time to see the blood fill the chamber-pot, when he fell back dead. On opening the body, I found an instrument lying across the commencement of the œsophagus, composed of two half phial corks, fastened together by strong thread, having previously had three pins thrust through each of them, so that the heads of the pins were applied to each other, back to back, the points sticking out beyond the cork, forming a sort of chevaux-de-frise: this, it is presumed, he covered with fat, and attempted to swallow; but the point of a pin catching, the efforts to swallow turned the machine across. In this situation the points of the pins were close to the carotid arteries, and having by degrees given rise to ulceration of the œsophagus, wounded them on both sides; every elongation or pulsation of the arteries having brought them against the point of one or more of the pins, the marks of which were observable in several small holes of different sizes on the sides of the vessels. As one or two of these became larger, from the constant attrition, blood came through into the œsophagus; and as they again increased by ulceration, larger holes were formed, from which the sudden and fatal hemorrhage took place. The instrument and the arteries I sent from North America to the late Dr. Hooper, and they ought to be in the museum of King's College.

CASE 120, by Staff-surgeon Collier.—William Ball, 44th regiment, aged twenty, was wounded by a spear or sword, on the 17th of June, which passed in at the angle of the left jaw, and penetrated the mouth, lacerating the tongue severely in three or four places. He was brought into hospital in Brussels on the 19th, and had, by his account, lost a considerable quantity of blood on the way. On the evening of the 22nd I found arterial blood jetting up with considerable force from the bottom of a narrow deep wound, and flowing in different directions as if from several branches of the external carotid. I attempted dilatation; but as all efforts to trace the sources of bleeding were fruitless, I applied steadily and forcibly graduated compresses, moderating the flow of blood by pressure on the carotid. Although the hemorrhage yielded for three or four minutes, it was soon evident it had only changed its channel, for it began to flow as furiously through the mouth as it had before done through the wound, and the coagula required to be constantly removed to prevent suffocation. My opinion being, that the patient's preservation depended on securing the common carotid artery, I performed the operation at eight o'clock that evening; the hemorrhage ceased the instant the ligature was applied. In two hours after the operation, the patient was quite tranquil and sensible; the pulse feeble; countenance very pale. On the following morning (23rd) I found him perfectly sensible and easy, with the exception of some sense of heat in the throat, rather increased since the operation; the pulse was 96, with slight sharpness; no appearance of hemorrhage. On the 5th of July the ligature came away, and on the 12th of August he was discharged cured, having suffered only from two slight attacks of erysipelas of the face, which gave no uneasiness.

CASE 121, by Mr. Mayo.—John Webb, aged twenty-three, was admitted into the Middlesex Hospital on the evening of the 18th of October, in consequence of a great loss of blood from an ulcer in the right side of the throat, which returned with such violence the next morning, the 19th, as to cause Mr. Mayo to place a ligature on the right common carotid, which arrested the bleeding. On the 3rd of November, the fifteenth day after the operation, the ligature came away from the artery. The ulcer of the pharynx had begun to cicatrise, and the patient shortly afterwards recovered.

CASE 122, by Mr. Luke.—T. B., aged forty-five a tall muscular man, was affected by sore throat for three weeks, and was awakened in the morning by something flowing from his throat, which proved to be blood, of which he lost four pints before it stopped. On the 3rd of October, three days afterwards, the bleeding returned, but soon ceased. In about a quarter of an hour he had lost between three and four pints of blood. October the 4th.—At 4, a. m., bleeding again returned. The patient was sensible, but apparently indifferent to surrounding objects. He had lost at this bleeding more than three pints of blood, and it seemed almost certain that he must die if another bleeding should take place. Mr. Luke therefore tied the carotid artery on the left side, that being the trunk which the circumstances of the case indicated to be the source of the bleeding vessel. The operation succeeded in stopping the bleeding, which recurred once, seven days after the operation, to the amount of two ounces. The two ligatures, which had been applied about half an inch apart without dividing the artery between them, came away on the twenty-second day after their application, and the patient perfectly recovered.

CASE 123.—I was sent for into Jermyn-street to see a gentleman, who in a moment of great anxiety of mind had cut his throat with a razor, and fell bathed in blood. The bleeding was arrested by thrusting sponges into the wound. The cut had been made with great violence across the throat, but was deepest on the left side, having laid bare the left carotid, and wounded the internal jugular vein, from which the principal bleeding came. The opening in the vein being distinct, I passed the point of a tenaculum through the edges made by the cut into it, and drawing them together in this manner, passed a single silk thread around so as to close the opening, without destroying the continuity of the vessel. The ends of the ligature were cut off close to the knot. The carotid was then clearly seen by the side of the vein, having a transverse mark or cut upon it, which did not appear to penetrate beyond the middle coat; and after due consideration, it was presumed that this wound might heal, without requiring a ligature to be placed upon the artery. On the eighth day arterial hemorrhage took place, and on opening the wound it came evidently from that part of the carotid which had been cut. placed a ligature upon the common carotid immediately below this opening, but the flow of blood was scarcely diminished in quantity by it, in consequence of the reflux from the head. On attempting to apply another ligature above the opening, I found, as I had before suspected from the situation of the wound, that it was immediately below the division of the common carotid into the external and internal carotid arteries. The hemorrhage ceased on placing a ligature on the external carotid, above the wound in the artery, and as the patient was greatly exhausted, I refrained from tying the other. The bleeding did not return, but he died the next morning from weakness.

On examination after death, the internal jugular vein was found pervious, and without a mark indicating where the ligature had been applied. The origin of the internal carotid was filled for about a quarter of an inch with a soft coagulum of blood; the remaining part up to its entrance into the skull was empty. The wound was exactly below the bifurcation of the artery, and the ligature on the external carotid might have been sufficient if the patient had lived.

This case will serve as a guide under similar circumstances. It shows that where an opening is made into a vein of the size of the internal jugular (its division not having been accomplished), a ligature may be made to include the cut portion without interfering with the canal of the vessel; and that where the two outer coats of a large artery are divided, it will be better to place a ligature above and another below the injured part at once, rather than to leave it to the efforts of nature alone. A direct wound of the common carotid is usually fatal from loss of blood.

CASE 124.—A soldier of the rifle brigade at Ypres, was wounded by a penknife in the throat, and bled profusely. Staff-surgeon Maling tied the common carotid above and below the wound, and succeeded in arresting the hemorrhage, although the patient did not eventually recover. The practice in such cases is clear, and ought to be decided.

In all cases of hemorrhage from the throat, which cannot be suppressed without tying the carotid artery, it is generally the external carotid which ought to be tied, and not the trunk of the common carotid. There is not sufficient reason for cutting off the supply of blood to the head by the internal carotid, unless the operation on the external should fail, when the common carotid may be tied as a last resource.

The common carotid artery has been tied several times for wounds inflicted on it, or on one of its two divisions, by foreign substances forced through the mouth into the tongue and throat. These persons have generally died from repeated bleedings, although some have recovered altogether, and others have failed and died ultimately from abscess in the brain, or after attacks of paralysis, caused by disease in that organ—the result probably of a defective supply of blood, of which Mr. Vincent has given the particulars of two cases in the *Medico-Chirurgical Transactions* for the present year.

CASE 125.—Mr. Vincent tied the right common carotid of John Mason on the 18th July, 1828, for an aneurism. In the evening the patient suffered from convulsions on the same side, which continued, and were followed by paralysis of the left side. The man died on the 24th. The brain on the right side was found soft and disorganised.

CASE 126.—Wm. Brown, aged twenty-eight, was wounded on the 9th April, 1845, by a tobacco-pipe, which, forced into the mouth, penetrated the root of the tongue on the right side. On the 16th great hemorrhage took place, which induced Mr. Vincent to place a ligature on the common carotid artery. Paralysis of the left side immediately followed, with twitchings on the right. On the 21st he died, and the brain was found softened and disorganised on the right, or the side on which the artery had been tied.

CASE 127.—M. Sedillot, *Gazette Medicale*, September 3rd, 1842. Charles Muller, ten years old, was wounded by a very sharp knife below the right side of the jaw, near the ear; which bled very freely at times, until the 5th day, when Dr. Francois attempted alone to tie the carotid; bleeding ceased for three days, when it returned, and Professor Sedillot was called in consultation. The professor says, "I insis on every occasion on the importance of the precept, to tie wounded arteries above and below the part injured. One avoids by this a thousand accidents, and the greatest dangers. This time, in the midst of mortified and diseased parts, I thought it better to tie the primitive trunk, surrounded even as it was by parts altered by the induratory and suppurative process." Three hours afterwards, complete hemiplegia of the left side of the body and of the right side of the face appeared, and the patient died ten days afterwards. Dissection showed the external carotid open, with a wound in it, but not divided. Both ends had bled. The head having been injected from the left or opposite carotid, it was found that the portion of the right common carotid above the ligature contained injection, brought into it by the internal carotid, by the facial, and particularly by the superior thyroid, and some large branches anastomosing with the internal carotid of the opposite side.

Remarks.—With respect to derangement of the brain, Le Noir reports in the *Dictionnaire des Etudes Medicales* that out of sixty-five cases he had collected, three died of delirium and convulsions, one adynamic, four from hemiplegia. In two others the intellect was weakened, in three vision was rendered defective on the opposite side, the brain showed a want of blood, and a softening of the right anterior lobe.

CASE 128, by Dr. Twitchell, of Keene, N. H., United States.—A soldier in a sham fight, in 1807, received a wound from the wadding of a pistol on the right side of the head, face, and neck, which were much burned. A large wound was made in

the mouth and pharynx; nearly the whole of the parotid gland, with the temporal, masseter, and pharyngeal muscles were destroyed The neighbouring bones were shattered, and the tongue injured. The hemorrhage was not copious, although the external carotid and its branches were divided Ten days after the accident the sloughs had all separated, and left a large circular aperture of from two to three inches in diameter, at the bottom of which might be distinctly seen the internal carotid artery denuded from near the bifurcation of the common trunk to where it forms a turn to enter the canal in the temporal bone. Directly on this part there was a dark speck of a line or two in diameter, which suddenly gave way whilst Dr. Twitchell was in the house. With the thumb of his left hand, he compressed the artery against the base of the skull, and effectually controlled the hemorrhage. The patient fainted. As soon as he was recovered, the doctor says, "I proceeded to clear the wound from blood, and having done this I made an incision with a scalpel downwards, along the course of the artery, to more than an inch below the point where the external branch was given off, which, as stated above, had been destroyed at the time of the injury. Having but one hand at liberty, I depended upon the mother of the patient to separate the sides of the wound, which she did, partly with a hook, and occasionally with her fingers. At length, partly by careful dissection, and partly by using my fingers, and the handle of the scalpel, I succeeded in separating the artery from its attachments, and passing my finger under it, I raised it up sufficiently for my assistant to pass a ligature round it. She tied it with a surgeon's knot, as I directed, at about half an inch below the bifurcation" Dr. Twitchell removed his thumb, and sponged away the blood, not doubting that the hemorrhage was effectually controlled; but, to his surprise and disappointment, the blood immediately began to ooze from the rupture in the artery, and in less than ten minutes it flowed with a pulsating jet. He compressed it again with his thumb, and began to despair of saving his patient, but resolved to make another attempt. Raising his thumb, he placed a small piece of dry sponge directly over the orifice in the artery, and renewed the compression till a rather larger piece of sponge could be prepared He placed that upon the first, and so went on pressing the gradually enlarged pieces obliquely upwards and backwards against the base of the skull, till he had filled the wound with a firm cone of sponge, the base of which projected two or three inches externally. He then applied a linen roller in such a manner as to press firmly upon the sponge, passing it in repeated turns over the head, face, and neck. On the 30th of December he was discharged cured, several fragments of bone and two teeth from the upper jaw having been cast off. Some deformity remained, in consequence of the depression on the side of the face.

Remarks.—This case shows very distinctly how readily the internal carotid can bring its reflux blood into the common trunk, whence it may ascend against gravity in the external carotid, and renew the bleeding, even if it should not be done by other anastomosing branches, as in Case 128.

CASE 129.—Dr. J. M. Warren, of the Massachussetts General Hospital, for a case of erectile tumour of the lower lip and tongue, which had supervened on a mark occupying nearly the whole of the left side of the face and head, tied the left carotid on the 5th of October, 1815. The patient recovered, and considerable diminution of the swelling followed. On the 7th of November, the right carotid was tied, the vessel being dilated to one-third more than its natural size; slight faintness and drowsiness followed the operation, and the patient recovered without further inconvenience. After some other operations about the part affected, the patient returned home cured. No pulsation could be discovered in the temporal, nor in any arteries of the head. In the neck, just above the clavicle, two large arteries were seen pulsating under the skin, being in all probability the supra-scapulares greatly enlarged. No affection of the brain followed the double operation.

Wounds of the hand and foot, accompanied by hemorrhage, and which may be considered to be deep-seated wounds, are often exceedingly troublesome. The same rules are however applicable to them—dilatation of the wound, and ligature of the vessel; or if this be not practicable, or be unsuccessful, compression on the principal trunk, and a graduated compress and bandage on the wound. The ulnar artery when wounded in the palm of the hand ought always to be secured by ligature. The radial being more deeply seated requires more precaution; and when an incision cannot be made of the necessary extent without injuring the median nerve or its branches, so as to paralyse the fingers, compression of both kinds should be tried. If the swelling of the hand will not admit of it, the radial artery should be first tied, and compression made on the ulnar, or a tourniquet may be applied on the brachial from time to time, and as a last resource, the ulnar artery must be tied also, but no one should rely on tying the brachial in the first instance; for, although such operation has succeeded, and may again succeed, it does so only by chance, and not by principle; inasmuch as the principle is that the collateral circulation should restore the bleeding. If the bleeding recurs in spite of this and of the gradnated compress, so applied as not to compress the whole hand, but only the bleeding part, and the swelling of the hand will not admit of its reapplication, the hand is still not to be amputated, but a clean and decided incision is to be made in the line of the wound, from the annular ligament to the finger (avoiding the flexor tendons), and down to the metacarpal bone, which bone and finger is *if necessary* to be removed; by which space will be obtained to see the bleeding vessels. The hand is only to be amputated as a last resource The foot is to be treated in a similar manner. I have seen many cases of hemorrhage from both; but I never saw either removed in consequence of it.

It is in wounds of that part of the radial artery where it dips into the hand that surgeons have had most inclination to place a ligature on the brachial artery. My excellent friend, Sir G. Ballingall, says on this point—"In two such cases I have successfully had recourse to the ligature of the humeral artery; and I have known the same operation twice executed with success by others. This is a practice which some will think more honoured in the breach than the observance; and it has I know been said, that there is no hemorrhage from vessels in the hand or foot which may not be restrained by pressure. This I believe may be true; but, on the other hand, I believe it to be equally true, that in certain states of a wound or ulcer the healing process will not go on nor the closure of the vessel take place under that degree of pressure which is necessary to suppress the bleeding; and it is by checking the flux of blood to the part, without irritating or inflaming the wound itself, that I believe the ligature of the artery above to operate favourably in such cases."

When the ulnar artery is wounded a little below its origin, and whilst covered by the pronator teres, and the superficial flexors of the forearm, viz., the flexor carpi radialis, palmaris longus, and flexor digitorum sublimis, the artery is to be secured at the part injured by two ligatures. A most excellent writer on the arteries, and whose book as an anatomical work is invaluable, says, page 215, "In the superior third of the forearm, the great depth at which this artery lies from the surface, and the number of muscles which cover it, render it impracticable to pass a ligature around it" A very simple question naturally presents itself—why is it impracticable? The answer is, it cannot be laid bare unless the muscles named above be divided; but to the question why this should not be done, it would be difficult to reply, unless it be honestly answered, there is no reason why it should not be done, other than that it has not been usual to do so.

I shall refer to a case in point.

CASE 131.—The surgeon says, "I was consulted in the following circumstances:— A child having a sharp pointed knife in its hand, had wounded the nursery maid below the elbow, and close to the ulna. The ulnar artery was wounded near its origin from the brachial artery. It bled profusely, and the surgeon tied the main artery by the side of the tendon of the biceps muscle. This stopped the hemorrhage for a time, but afterwards it returned from the wound. The ulnar artery was then tied below the wound, for it was apparent that the blood returned from below. What was next to be done if it should again bleed? Tie the radial artery. But it did not return. We see however the difficulties which overtake us when the primary branches are wounded near their trunks, and the surgeon will have to determine the propriety of tying the trunk, or of enlarging the wound, and tying the bleeding orifices In this case there might have arisen a necessity for three operations instead of one. As it happened, it was dexterously done, and happily."

Remarks.—As there is no name given with this case, and I cannot hurt the feelings of any one by my remarks, I shall take the liberty of saying there never was anything done so directly contrary to the principles of surgery, in regard to wounded arteries. In the first place, for a wound of the ulnar artery, the brachial was tied, thus applying the Hunterian theory of aneurism to a wounded artery In the second place, the ulnar artery was tied in a similar manner, some two or more inches below the wound, being a more pardonable error of the same kind. This operation succeeded, because the collateral branches had not time to bring the blood into the arteries below the ligature on the brachial, and above that on the ulnar artery, before they were closed by the inflammatory and natural processes. This case therefore furnishes another proof of the fallacy of the opinions on the collateral circulation which I have just exposed. The reporter does not however stop here; he comments upon it, by inquiring what was next to be done, if it had bled again?—and replies himself to the question—Tie the radial artery. Now it would be difficult to conceive why the radial artery should be tied for a wound of the ulnar, if the surgeon were not alarmed at the thought of dividing muscular fibres, in which the only difficulty lies. In order to avoid dividing muscular fibres, a separate and distinct artery is to be tied; and what could that operation have done? on what principle could it be useful? By tying the radial artery, the return of blood through it into the humeral end of the ulnar might have been prevented. But it would not *certainly* have been prevented, because there are radial, and ulnar, and interosseal recurrents, all returning blood, or capable of doing it, after the lapse of a few days, into the cut and open extremities of the artery, and they might all require to be tied in succession. If the opinions entertained on the subject of the collateral circulation by its strongest advocates were correct, they must and would all have required it.

The error in this case was original. The surgeon should have made a clean incision down to the artery, through all the muscular fibres interposed between it and the surface, avoiding the median nerve, which runs between the two origins of the pronator teres muscle, and then he should have placed a ligature above, and another below the wound in the artery, and there would have been nothing more to do.

The person's life was endangered, two operations were done, and a third, and probably amputation as a last resource, were only avoided by an accidental circumstance, viz., that the cut end of the artery became impervious before the recurrent and collateral branches brought their blood round into it; and all this was incurred merely that a few muscular fibres might not be divided. It is necessary now to ask, what would be the consequence of this division? The utmost consequence which could ensue would be weakness of the arm in the performance of certain motions; but I have no hesitation in affirming that no such consequence would ensue. I have seen the parts divided—nay, I have divided them myself—and the patient has recovered without any sensible defect.

These remarks are taken altogether from my work published in 1830. I could not make them stronger or more effectively convincing to those who will allow themselves to be convinced.

Wounds inflicted on arteries in bleeding ought to be treated on the principles laid down for the management of wounded arteries generally. Whenever an accident of this kind occurs at the bend of the arm, and the bleeding cannot be effectually restrained by compress and bandage as in cases 1, 2, &c, an incision should be made down to the artery, and one ligature applied above and another

below the wounded part. It is almost always the brachial artery that is wounded, and not the ulnar or radial, unless the latter is given off high in the arm. This practice would be seldom followed by any bad or unfavourable result, if it were immediately adopted; but as the error is usually made by persons incompetent to the performance of the operation, the bleeding is in the first instance restrained by pressure, until its repeated recurrence renders other assistance necessary. The arm is then, in all probability, more or less injected with blood, inflammation has taken place, the constitution can scarcely have failed to sympathise, and the operation under these circumstances is frequently ineffectual; amputation follows, and death. The following case may serve as an example:—

CASE 130.—A poor man had the artery opened at the bend of the arm in bleeding, and the operator, suspecting the accident he had committed, applied a compress and bandage to restrain the hemorrhage, which nevertheless recurred several times; on which he was sent to the hospital, with the arm inflamed, swelled, and injected with blood. The brachial artery was tied close to the wounded part, but as the bleeding returned, it was again secured a little higher up; but, as hemorrhage again took place, amputation was had recourse to, and the patient died exhausted.

Remarks.—On dissection, the brachial artery was found to be the vessel injured, immediately at its bifurcation, so as scarcely to allow of a ligature being applied to the trunk below. In this case, three ligatures would perhaps have been required in the first instance, one on each artery, viz., the trunk of the brachial, and the commencement of the radial and the ulnar arteries. I have preserved the parts. When the wound in the artery is of a small size, an operation is not always required, but that can be rarely ascertained until it is found that the injury is not followed by bad symptoms. When an operation is not performed, and pressure is applied, it is possible that the wound in the artery may heal, but this does not usually take place, and an aneurism is the consequence. This may be of two kinds—circumscribed or diffused. If the artery has been punctured below the bend of the elbow by an operation on the median basilic vein, the aponeurosis of the biceps muscle is interposed between the vein and the artery, and will tend under pressure to confine the effused blood, so that at last the inflammatory process will consolidate the surrounding parts, and, if the external wound close, give rise to a circumscribed aneurism. For this, if some weeks have elapsed, the operation of placing a ligature on the trunk of the artery may be had recourse to as near the aneurism as possible, the principal reason for doing it at a distance, viz., the diseased state of the artery, being wanting; and one ligature will be sufficient.

When the artery is wounded above the edge of the aponeurosis of the biceps, and the external wound closes, the effused blood may extend upwards in the course of the vessel, so as to form a diffused aneurism. These injuries are now of rare occurrence in England, and my opportunities of seeing them have not been so frequent as to enable me to lay down rules for their treatment with that confidence with which I write on all other points. I shall therefore refer to the best authority I know—to the recorded opinion of the late Dr. Colles, of Dublin, as stated by Mr. Harrison,—accidents of this kind being apparently more common in that city and in its vicinity than in London and its neighbourhood. He says, "I have operated repeatedly, and with success, for the cure of brachial aneurism, in consequence of injury to the artery in performing venesection. I have also frequently assisted others in operating for the same cause, and with the same result; and I never yet found it necessary to open the aneurismal sac, or to look for the vessel below the tumour, or to apply more than one ligature around the artery, and which I think ought always to be tied as near as possible to the seat of the disease." This method of treatment, combined with moderate pressure along the aneurismal sac, the horizontal position, and if necessary active depletion, will rarely fail of success. It should, however, be borne in mind that if the surgeon on committing the error applies his compression on the artery in a methodical manner, and before any extravasation takes place into the surrounding parts, he will rarely fail of success, as in case No. 1.

If the wounded vein should adhere to the cut edges of the wounded artery—leaving a direct communication between the one and the other—the blood is propelled into the vein, enlarges it, and constitutes what is called an *aneurismal varix*. But if there be any cellular texture interposed between the opening in the artery and vein, yet communicating with both, it gives rise to the change of denomination to *varicose aneurism*. Neither of these complaints, which are essentially the same, requires an operation in the generality of instances; after attaining a certain size and appearance, they often remain stationary through life. When either from the increase of size of the swelling, or the anxiety of the patient, an operation is considered necessary, it should be done by incision at the part, and the application of two ligatures to the artery; for although in some cases one has been found sufficient, the records of surgery furnish abundant proof that blood has been returned to the sac by the anastomosing branches, and a second operation has been required to effect a cure, the conclusion to which M. Amusat has arrived and declared in his memoir, inserted in the *Journal de Chirurgie* of M. Malgaigne, for 1843.

A Course of Lectures on Hernia,

BY JOHN FLINT SOUTH, Esq.,

Surgeon to St. Thomas' Hospital, and Professor of Surgery to the Royal College of Surgeons.

(Delivered in the Theatre of the College, and revised by the Professor for the MEDICAL TIMES.)

LECTURE IV.

Operation without opening the sac as advised by Sir Astley Cooper, in old and large ruptures; Extension of this practice to all cases of strangulated rupture; Petit its originator; His reasons for proposing this modification; Petit's proceeding after return of the parts; Mr. Key's views of the operation; Mr. Luke's practice; Professor South's experience; Objections to the operation without opening the sac; Table of sixty-eight cases showing the results of the different operations; Treatment of the wound; Constitutional treatment; Clysters, Petit's observations; Symptoms of strangulation after the return of the bowel; Causes, Sir Astley Cooper's observations; Mr. Key's and Mr. Lawrence's remarks; Mr Pott's Case; Suppuration in the sac; Mr. Traver's case; Sinking without apparent cause after the operation; Mr. Key's explanation; Sir Astley Cooper's case of tetanus after the operation.

Such is the ordinary mode of operating on strangulated ruptures, but when the rupture is large and old, Sir Astley Cooper has advised that the sac should not be opened, but that the stricture should be divided external to the sac, "unless the stricture is situated within the sac itself." Of the four reasons he assigns for this practice, the only real one is "the risk of an inflammation which will be attended with fatal consequences," from the exposure and handling of the intestine.

I do not, however, think that the danger is from opening the sac, but on account of the violence which is required in attempting to return the bowels into the cavity of the belly, which, from their long absence from it, is uncapable of receiving them, or if it do receive, will very speedily protrude them again. In operating on a large rupture I should, however, only open the sac sufficiently to get at the stricture, and divide it with safety. I would avoid making a large opening in it, because in a large rupture if the bowels get completely out of the sac, there is very great difficulty in replacing them even in it, and they are necessarily much handled, which does them mischief; and in that it is I believe the danger consists.

The practice of dividing the stricture external in the sac has, however, been of late extended to ruptures of all kinds, whether large or small, with a view to the prevention of peritoneal inflammation, arising out of exposure of the bowel to change of temperature, to light, and a current of air.

Petit first proposed the operation of dividing the stricture without opening the sac, but the avoidance of the exposure of its contents to the air, was not the great object of his operation. He observes, indeed, "it is very advantageous to avoid this operation (opening the sac), because the parts are not exposed to the air, and we run no risk of wounding them in opening the sac; and, besides, as to the results, it is more advantageous, as I shall elsewhere show, that the sac should not suffer any solution of continuity;" why he considers this practice more advantageous is presently shown, when he observes, "that for curing ruptures radically, and without recurrence, the sac must be preserved entire." And he proceeds, "I have mentioned many instances, I have made upon the bodies of persons who have been cured of rupture by the use of bandage, and without operation, and have lived many years aftercure without any inconvenience or appearance of rupture. I have found, that in some, the parts had become adherent to that portion of peritoneum which had previously formed the sac; that in others this part had become thickened, and adherent with the muscular rings, the spermatic vessels and everything in the neighbourhood; that the whole united together had formed a rampart impenetrable to the abdominal parts. On the contrary, I had noticed in those cured by operation, that these parts were weak and easily overcome; that in many there was even some beginning of a disposition to rupture; and I have seen so great a number attacked with rupture so short a time after their cure, that I could not avoid believing that the practice of opening the sac was the cause, or rather the neglect of wearing the truss sufficiently long after the cure." It must, however, be mentioned that in the operation for strangulated rupture by opening the sac, as performed by Petit, his proceeding after the return of the protruded parts was such as we should naturally expect would produce untoward results. True, indeed, he did not introduce a tent into the mouth of the sac, as practised by others, but instead, he says he used, "a pad of charpie lightly enclosed, and tied up in linen with a double thread four or five inches long; this pad was of sufficient size not to enter the ring, but, on the contrary, to extend above the aponeurosis (tendon) of the oblique muscle; for his object, says he, "was not to keep the passage open, to give vent to what might be in the belly, except under particular circumstances; I only wished to prevent the escape of the intestine and omentum, and the pad I used, perfectly answered that object, as it acted directly upon the ring as the pad of the truss could only do through the skin and fat." With such an extraneous body as the pad at the sac's mouth, it was not surprising that there should be danger, and certainly if the pad were used, it were preferable that the sac should not be opened. In treating cases without opening the sac, Petit prefers using the pad which "induces the return of the sac as early as possible" after the operation, in preference to "the tent which keeps it without," and he observes further "if the sac return, of which there is no doubt, it is advantageous that it should be entire, for if it have been divided, that part of the peritoneum will be like that of other parts of the belly when it has been wounded, when gastroraphy has been performed, or when the wound has healed without it, that part is always more weak and disposed to favour a rupture." From this account, it is quite evident the great object which Petit had in view, was the more perfect cure of the rupture by not weakening the peritoneum with a scar; and that the exposure of its interior was, with him, of minor importance. With this account of Petit's views, and considering that Sir Astley Cooper's statement even in reference to large ruptures is not very decisive, there can be no doubt that to Mr. Key is justly due the credit of proposing the division of the stricture, external to the sac, for the purpose of guarding against peritoneal inflammation by exposure of the bowel. This practice has been largely followed by Mr. Luke and with most remarkable success, as he states that he has sustained only five failures out of thirty two cases, in which he had attempted to leave the sac unopened.

Personally I have not had any experience in reference to this operation, for I do not think there is much danger in opening the peritoneum, and there are sufficient cases in which, under other circumstances, its cavity has been cut into without

fatal consequences, to lead to the belief that inflamed peritoneum, subsequent to operation for strangulated rupture, depends on some other cause; either from the injury which the bowel has suffered in the attempt to reduce it, or the severity of its constriction; for there are few surgeons who do not allow if the rupture have not been roughly handled, and if the operation be performed soon after the strangulation, that generally the case goes on well, and the patient recovers; but if there have been much bruising, and the operation delayed, then it very probably will terminate unfavourably.

One great point in regard to Mr. Key's operation is in which of the coverings of the strangulated bowel is the stricture; if it be in the peritoneal sac principally, if not entirely, as by most surgeons allowed, it cannot be well imagined how the division of the parts before it can relieve the stricture. It certainly may be that in a newly produced rupture which has become strangulated, the parts in front of the neck of the peritoneal sac may form the principal part of the stricture, as there will not have elapsed sufficient time for it to have become thickened; but in a rupture of some standing, the neck of the sac always is thickened, sometime even juts like a collar into the mouth of the sac, as in prep. No. 1285, and must itself form the stricture independent of the surrounding parts, the division of which cannot therefore relieve it. I cannot agree with Mr. Key that the ordinary characters of a completely sphacelated portion of bowel are distinct enough," for I am quite sure I have seen gangrenous bowel without induration of it previous to opening the sac; and, on the contrary, with appearances leading to the expectation of gangrene, the gut has been found healthy. With these difficulties, and with the occasional existence of stricturing bands in the body of the sac itself, and not considering there is anything to be feared from exposure of the bowel, I am still disposed to prefer the old practice of opening the peritoneal sac, and dividing the stricture within it. After the return of the bowel it is generally advisable to keep the edges of the wound together with one or two stitches, and intervening slips of plaster, with a pad of lint over the whole.

If there be much tenderness of the belly, it is advisable at once to give calomel and opium every six hours, to check the inflammatory action which has probably commenced. But if there be little tenderness or none, it is better to do no more than apply the flannel bags filled with warm camomile flowers to the belly, and to leave the bowels undisturbed for some hours, so that they may recover themselves, and generally in the course of four or five hours stools are passed, as very often purgative medicine has been taken in no small quantity, and though vomiting has been frequent, there still remains sufficient to excite the action of the bowels. If no relief be obtained after ten or twelve hours, it is advisable then to throw up a clyster of castor oil and gruel, or senna and salts, and repeat this if necessary two or three hours after After twelve hours more, unless the bowels have been very freely moved, a dose of castor oil should be taken by the mouth, if the patient have no repugnance to it. This is preferable to senna and salts, which commonly produce watery stools, but leave solid lumps of fæces behind. Or it may be even necessary to give calomel, but the less that is done the better, for in no case is Petit's observation more true than in the after treatment of strangulated rupture. "Happy are the patients who fall into the hands of surgeons who believe that seemingly miraculous cures are rather due to nature than to art; who occupy themselves only in removing what they believe disturbs or interrupts nature in her functions." If, however, decided symptoms of inflammation ensue, they must be promptly met, and actively treated, or the patient will be lost. In addition, therefore, to calomel and opium, bleeding by leeches from the belly, or bleeding from the arm, must be resorted to, and warm poultices or blisters to the belly, though if the latter can be avoided it is best, as there is often difficulty in distinguishing the pain within from that which is without the belly.

When, after the return of the bowel, symptoms of strangulation continue, it may be presumed that although the strangulation found has been relieved, yet there is elsewhere existing an internal strangulation; this may either depend on the gut being compressed between the omentum remaining in the sac, as in Mr. Green's case already alluded to; or the intestine may have been returned into the belly still girt by a membranous band derived from the sac, but which had been separated from it probably in the operation, as in No. 1294 of the collection at St. Thomas's, or it may be strictured by a band passing from the omentum to the mesentery, as in No. 1360 of the College collection, or by a band presumed to be the remains of the omphalo-mesenteric vessels passing from a diverticulum of the ileum, and attached to the mesentery, as in No. 1361.

There may, however, sometimes continue symptoms of strangulation without any strangulation existing. Such a case I had in a woman, who lived thirty-six hours after the operation for femoral rupture, and had the bowels relieved only a few hours before her death; only a portion of the intestinal tube had been strangulated, and the marks of inflamed peritoneum were very slight.

Sometimes a portion of bowel, which has not any decided marks of gangrene, but of which the coats are much thickened merely by serous effusion, may after its return be so injured by its confinement in the sac, that it cannot recover. This happened in a case to which I have already alluded; the stricture had not been tight, but there was a large quantity of gut down. Within twenty-four hours, the bowels were relieved by clysters, and continued to act during the six days he lived after the operation; but hiccup and vomiting came on on the second day, and continued till his death. In rare cases a gut, seemingly sound though dark coloured, and consequently returned into the belly, will afterwards slough; a case of this kind happened to Sir Astley Cooper, in which on the third day fæces were discharged from the wound, and continued so to do for five days. A similar instance occurred to Mr. Key, on the fourth day, which continued for some time. In both these cases the bowels had been naturally relieved previously, and both recovered. A still more remarkable case of the same kind is mentioned by Mr. Lawrence, as having happened under Mr. Ramsden's care, in which the woman "was seized, in about six weeks after the operation, with violent pain in the lower part of the abdomen, which terminated in two days in a discharge of fæces from the wound, and perfect case." Ten days after she died.

If a strangulated rupture be left to itself, its contents mortify, and Petit considers sufficient constitutional powers are got rid of by sloughing. Petit considers that, under such circumstances, an omental rupture is least dangerous, because it may mortify, suppurate, and form an abscess, which bursts and heals like another abscess. That such may be the case, the instance mentioned by Mr. Pott seems to confirm, in which a person having a reducible rupture "from the sudden spring of an unruly horse struck it with great violence against the pummel of his saddle, which gave him immediate pain; next day it swelled still more, and became more painful, but that, being afraid or ashamed, he still concealed it, and only anointed it with something greasy, till at last he could bear it no longer; the person to whom he showed it took it for a hydrocele, tapped it, and let out a pint of brown serous fetid fluid, and on the fifth or sixth day after Mr. Pott saw him. The whole scrotum was much inflamed, and the orifice made by the trocar foul and sloughing; he had a degree of heat and fever upon him, which forbade any operation at that time, "he was therefore ordered a poultice, bleeding, and glyster." By proper care the tumour subsided, the fever left him, and the slough casting off largely, brought the putrid omentum in view, upon sight of which Mr. Pott would have laid the whole open, but was not permitted. He enlarged the orifice a little, and in so doing cut through an old hernial sac, which was very thick and hard; what part of the omentum was loose he brought away with a pair of forceps; but the separation of the whole took up much time, and the hard hernial sac caused so many abscesses, and occasioned so large a discharge, that being a valetudinarian, he had certainly sunk under it, had it not been for the free use of bark.

The mortification of the gut Petit considers more dangerous: if the gangrene do not previously destroy him, the mortified gut bursts, stercoraceous matter is discharged into the sac, and if that, together with the integuments, mortifies, the escaped fæces make their way out daily by one or more openings. In a case of this kind, in which the groin and scrotum were gangrenous and perforated with many holes, through which escaped excrement mixed with bilious matter and some white flakes of clotted milk, Petit made a free opening, by which a large quantity of the contents of the bowel escaped, and found the gut adhering, especially about the ring. The patient recovered, and the fistulous opening healed in twenty-five days. In another case, in which the intestine burst, and the swelling had become suddenly large, with a noise of water and wind, he "made an opening into the sac for the escape of its contents, which immediately burst forth with a noise, inundating the bed and some of the attendants, as eight times as much escaped as the swelling could contain." A poultice of herbs was applied, and the fæces passed by the wound till the sixth day, when the bowels were naturally relieved in part. After the eighteenth day no more fæces passed by the wound, and it soon healed. Suppuration sometimes takes place in the sac after the operation for strangulated rupture. I have had one such case, but, except in retarding the cure a few days, it was not of any consequence. I recollect, however, seeing in a patient, under Mr. Travers' care, inflammation extend from the sac into the cellular tissue, as high as the navel, and round the right loin, which terminated in large sloughs; the patient, however, ultimately recovered. Occasionally, though rarely, after the operation, and without any apparent cause, the patient sinks and dies without any attempt to rally, either speedily or in a few days. On examination, the gut, which at the operation had seemed healthy, is found either distinctly gangrenous or thickened, and its tissues loaded with serum and slightly discoloured. Mr. Key thinks that the exposure of a portion of bowel possessing such feeble powers of resistance to morbid influence cannot but tend to increase—probably to excite—a disposition to inflammation, which, though low in degree, is sufficient to destroy its vitality; and it may, therefore, be fairly regarded as the main agent in the production of gangrene. I am rather disposed, however, to believe that the mischief has been done before opening the sac, and that the disturbance or arrest of the circulation through the gut has been sufficient to prevent its recovery, and, therefore, that it is to all intents and purposes as much dead as if it were in a state of actual gangrene.

Sir Astley Cooper mentions one remarkable instance of tetanus following the operation on the eighth day, by which the patient was quickly destroyed.

ORIGINAL CONTRIBUTIONS.

ON THE POWER OF THE MIND OVER THE BODY:

AN EXPERIMENTAL INQUIRY INTO THE NATURE AND CAUSE OF THE PHENOMENA ATTRIBUTED BY BARON REICHENBACH AND OTHERS, TO A "NEW IMPONDERABLE."

By JAMES BRAID, M.R.C.S. Edin., &c., Manchester.

(Concluded from p. 216.)

Another interesting case of a married lady I experimented with in presence of her husband, as follows. I requested her to place her hand upon the table, with the palm upwards, so situated as to enable her to observe the process I was about to resort to. I had previously remarked that in consequence of my drawing something slowly over the hand, *without contact*, whilst the patient concentrated her attention on the process, she would experience some peculiar sensations. I took a pair of her scissors, and drew the bowl of the handle slowly from the wrist downwards. I had only done so a few times, when she felt a creeping chilly sensation, which was immediately followed by spasmodic twitching of the muscles, so as to toss

the hand from the table, as the members of a prepared frog are agitated when galvanised. I next desired her to place her other hand on the table in like manner, but so placed that by turning her head in the opposite direction, she might not see what was being done, and to watch the sensations in that hand, and tell us the results. In about the same length of time similar phenomena were manifested as with the other hand, although in this instance I had done nothing whatever, and was not near her hand. I now desired her to watch what happened to her hand, when I had predicted that she would feel it become *cold*, and the result was as predicted; and *vice versa*, predicating that she would feel it become intensely hot, such was realised. The same phenomena of heat and cold were also produced when I desired her to think of the tip of her nose, when the predicated result either of heat or cold was speedily realised.

Another lady, twenty-eight years of age, being operated on in the same manner, whilst looking at my proceedings, in the course of half a minute described the sensation as that of the blood rushing into the fingers, and when the motion of my pencil case was from below upwards, the sensation was that of the current of blood being reversed, but less rapid in its motion. On resuming the downward direction, the original feeling returned still more powerfully than at first. This lady being requested now to look aside whilst I operated, realised similar sensations, and that whilst I was doing nothing. The husband of this lady, twenty-eight years and a half of age, came into the room shortly after the above experiment was finished. She was very desirous of my trying the effect upon him, as he was in perfect health. I requested him to extend his right arm laterally, and let it rest on a chair, with the palm upwards, and to turn his head in the opposite direction, so that he might not see what I was doing, and to concentrate his attention on the feelings which might arise during my processes. In about half a minute he felt an *aura* like a breath of air passing along his hand; in a little after a slight pricking, and presently a feeling passed along the arm, as far as the elbow, which he described as similar to that of being slightly electrified. *All this while I had been doing nothing* beyond watching what might be realised. I then desired him to tell me what he felt NOW, speaking in such a tone of voice as was calculated to lead him to believe I was operating in some different manner. The result was that the former sensations ceased; but when I requested him once more to tell me what he felt *now*—the former sensations recurred. I then whispered to his wife, but in a tone sufficiently loud to be overheard by him—observe now, and you will find his fingers begin to draw, and his hand will become clenched—see how the little finger begins to move, and such was the case—see the next one also going in like manner, and such effect followed; and finally the whole hand closed firmly, with a very unpleasant drawing motion of the muscles of the forearm. I did nothing whatever to the patient until the fingers were nearly closed, when I touched the palm of his hand with the point of my finger, which caused it to close more rapidly and firmly. After it had remained so for a short time I blew upon the hand, which dissipated the previously existing mental impression, and instantly the hand became relaxed. The high respectability and intelligence of this gentleman renders his testimony very valuable, and especially as he was not only wide awake, but had never been mesmerised, hypnotised, or so tested before.

Another gentleman, twenty-one years of age, was tried by drawing my gold pencil-case along the palm of the hand, without contact. At the fourth traction (he was looking at the part and my process) he described a cold *aura* following the course of the pencil, then a pricking, and after a few more courses he described it as rather a warm pricking sensation, such as that experienced from the sun's rays concentrated on the skin by a lens. By reversing the passes from the points of the fingers towards the wrist, the *aura* was changed: he described the sensation as that of forcing back the blood in the veins when they are much distended. I then proposed to experiment on his other hand, whilst his head was everted, when similar sensations were realised, although on this occasion I had done nothing—the whole results having arisen from his own concentration of inward consciousness changing the physical action of the part and recalling his former association of ideas in reference to the other hand. I now explained to him the law which seemed to obtain in the production of such phenomena, and desired him to satisfy himself of the fact, by concentrating his attention on the upper part of his foot, and watching the result. Here, also, he experienced similar sensations arise, even whilst he was aware that I was doing nothing; but the effects took place less rapidly than in the former experiments with the hands. It is also worthy of remark, that this gentleman found very severe headach result from these experiments, which, however, I was enabled very readily to remove by another process.

A lady, thirty years of age, was requested to hold out her right hand over the arm of an easy chair, whilst she turned her head to the left, to prevent her from seeing what I was doing, and to watch and describe the feelings she experienced in the hand during the process, which was to be performed without contact. She very soon felt a pricking in the point of the third finger, which increased in intensity, and at length extended up the arm. I then asked her how her *thumb* felt, and presently the same feeling was transferred to it; and when asked to attend to the *middle of the forearm*, in like manner the feeling was presently perceived there. All the time I had been doing *nothing*; the whole was the result of her own mind acting on her hand and arm. I now took the large magnet, and allowed her to watch me drawing it slowly over the hand, when the feeling was much as before, only that she felt the cold from the steel when brought very near to the skin. It was precisely the same when closed as when opened, and the *same* sensations occurred when the north pole alone was approximated, or the south alone, or both together. She experienced no sense of attraction between her hand and the magnet from either pole, or from both combined.

I now requested this lady to keep a steady gaze upon the poles of the third large horse-shoe magnet, and tell me if she saw anything (the room was not darkened nor was the light strong), but nothing was visible. I then told her to look steadily and she would see flame or fire come out of the poles. In a little after this announcement she started, and said, "Now I see it, it is red; how strange my eyes feel," and instantly she passed into the hypnotic state. This lady had been repeatedly hypnotised. I now took the opportunity of testing her, as to the alleged power of the magnet to attract her hand when asleep, but, as in the other cases, the results were quite the contrary—the cold of the magnet (and of either pole alike) caused her to withdraw her hand the moment it touched her. I now requested her to tell me what she *saw* (she being still in the sleep). She said she still saw the red light. I desired her to put her finger to the place where she saw it. This she declined to do, being afraid it would burn her. I thereupon assured her it would not burn her, upon which she pointed *to the same place where the magnet was held before she went into the sleep*, instead of to where it was now held, which was near to her face, but towards the *opposite* side of the chair. This lady does not see through her closed eyelids when hypnotised, as some patients do; and the evidence her testimony affords in support of my opinion upon this subject is very conclusive, as she is a lady of very superior mental attainments, and one whose testimony merits unlimited confidence.

I beg to call particular attention to the fact, that in this latter case, as with the fifth of the vigilant cases narrated, the *first* experiments were tried without any magnet or other object being pointed at or drawn over them, and still the mental influence was quite sufficient to change the physical action, and produce decided and characteristic effects, where there could be no influence from without of the nature alleged by Baron Reichenbach and the Mesmerists.

A lady, upwards of fifty-six years of age, in perfect health, and wide awake, having been taken into a dark closet, and desired to look at the poles of the powerful horse-shoe magnet of nine elements, and describe what she saw, declared, after looking a considerable time, that she saw nothing. However, after I told her to look attentively, and she would see fire come out of it, she speedily saw sparks, and presently it seemed to her to burst forth, as she had witnessed the artificial volcano of Mount Vesuvius at some public gardens. I closed down the lid of the trunk which contained the magnet, *but still the same appearances were described as visible*. By putting leading questions, and asking her to describe what she saw from *another* part of the closet (where there was nothing but bare walls), she went on describing various shades of most brilliant coruscations and flame, according to the leading questions I had put for the purpose of changing the fundamental ideas. On repeating the experiments, similar results were repeatedly realised with this patient. In like manner, when she was made to touch the poles of the magnet when wide awake, no manifestations of attraction took place between her hand and the magnet, but the moment the idea was suggested that she would be held fast by its powerful attraction, so that she would be utterly unable to separate her hands from it, such result was realised; and, on separating it by the suggestion of a new idea, and causing her to touch the *other* pole in like manner, predicating that *it would exert no attractive power* for the fingers or hand, such negative effects were at once manifested. I know this lady was incapable of trying to deceive myself, or others present; but she was self-deceived and spell-bound by the predominance of a pre-conceived idea, and was not less surprised at the varying powers of the instrument than others who witnessed the results.

In like manner, a gentleman, twenty-four years of age, who had suffered severely from epilepsy, for eleven years (notwithstanding the persevering use of medicine of various sorts, prescribed by many of the most able members of the profession, but who is recovering very satisfactorily under the hypnotic treatment), was taken into the above closet and tested as the latter. He likewise saw nothing till I suggested that he would see flame and light, after which predication he very speedily saw it accordingly, not merely where the magnet was, but also from other parts of the apartment. Now both this patient, and the last two referred to, when taken into the closet *after* the magnet had been a long time removed to a distant part of the house, still saw the flames, and changing colours as before—a clear proof that the whole was a mental delusion arising from an excited imagination, on the point under consideration, changing physical action. The same gentleman being made to look at the point of a piece of brass wire, could be made to imagine that he saw any sort of flame or colour indicated issuing from it, *even in broad daylight*; and when made to touch it with a finger, and then told he would find it impossible to draw it away, the mere idea was sufficient to paralyse his volition, the whole muscles became rigid, and he looked with astonishment at his condition; but the moment I said *now the attraction is gone*, and his hand will separate, such results followed. Moreover, now that his finger was a little withdrawn, by simply saying confidently that it would *now* be found that he could not touch the wire, as it would repel him, the idea once more paralysed his volition, and he again manifested his incapacity, and in spite of his anxious, but misdirected efforts, there he remained fixed as a statue. On hinting that *now* the influence was suspended, the hand and arm became limber, when I told another person watching the experiment that now he would find the hand irresistibly drawn to the wire; and such result was presently manifested. No one had touched this wire for hours; it was merely a piece of bent brass-wire which was lying loosely on the chimney piece, and projecting from it.

In like manner having intimated to a friend the remarkable vividness of this patient's imagination, implicit belief, and credulity, which rendered him liable to believe he had an ocular perception of an external change, according to whatever idea might be suggested to him by others, I requested this friend, when we went into the room, to look at the end of the above wire at the same time with the patient, and that the former should pretend to me, when asked what coloured flame she saw emanating

from it, to give a new idea at each inquiry. By this mode the patient caught the ideas suggested, having no notion that he was deluded in the way indicated.

I have likewise performed analogous experiments with four other patients, with [illegible] results, both as to causing [illegible] saw flames of various colours [illegible] where there was no magnet, [illegible] merely looking at the [illegible] walls, and also [illegible] broad daylight, from the end of the above wire, from the nob of a table drawer, and even from the end of a parasol held in the lady's own hand. In the latter instances, the flames were seen, about an inch long, with the colours varying according to the ideas suggested through leading questions, or direct statements tending to change the former ideas. The testimony of the patients here referred to was above suspicion. However, I have never met with any case of accurate thought reading, when the patients could generally and accurately interpret my unexpressed thoughts and desires regarding him, without some sensible sign to indicate my ideas to him; but, as already stated, I feel confident that there are many, who, from their excited and concentrated state of mind, will catch ideas far more quickly than in the ordinary condition, who may be thus imposed upon, and excited to act by means of impressions received through the senses, which would entirely escape them in the ordinary condition.

But not only may patients, in the waking state, be made to believe that they see various forms, and colours, and perceive variable sensible impressions and irresistible powers, drawing, repelling, or paralysing them, from a strong mental impression changing the physical action of the organ or part usually engaged in the normal manifestation of such function; but I have, moreover, ascertained that the same influence may be realised in respect to sound, smell, taste, heat, and cold. So that suggested ideas, and concentration of inward consciousness are competent, with some individuals, to excite ideas, not merely of hearing vague sounds, but particular tunes, the smell of particular odours, and to discriminate particular tastes, and feel heat or cold. All this I have proved may be realised *with some excitable subjects* when they were wide awake; and when there was neither actual sound, nor odour, nor taste, in the situations and substances to which they were referred

The subjects with whom I made these experiments were worthy of implicit credit as to their integrity, in describing their feelings and belief, and the whole results, therefore, are atributable to the remarkable reciprocal actions of the mind and body on each other, to which I have so often referred.

That some of Baron Reichenbach's patients should have manifested the power of seeing luminous emanations in the dark, over the graves of the dead, more especially of those recently buried, I think admits of a more probable explanation than that propounded by the Baron. We know that during certain states of decay of vegetable and animal matter, a phosphorescent appearance is manifested in the dark, to ordinary vision, and of course it must be still more so to the highly sensitive. But there is another result of such organic decay still more powerfully felt by all, viz., its disagreeable odour. Few can escape the recognition of this, even in the bright light of day. Again, we are so much in the habit of associating visible or tangible forms with impressions which are conveyed to our minds through any of the organs of sense, that the blind are in the habit of expressing themselves as *seeing* such and such persons, whom they recognise approaching, merely by the sound of their voices, or tread of their steps, and so on.

In like manner a smell of any sort suggests corresponding ideas, and I have found hypnotic patients who recognised individuals of their acquaintance quite readily by *smell*, who always said; when asked how they knew who was present, "I see him, or her," when the nostrils were stopped, though the party had gone away. The sympathy which exists between the eyes and the nose is well proved by a strong light producing sneezing; and the converse of this is very natural, that a strong impression on the olfactory nerves might excite in [illegible] of a highly sensitive and imaginative [illegible] and of some visible appearance. This [illegible] account for the ghost story quite as [illegible] the theory of the Baron, and will be [illegible] really available, as few people are [illegible] as to be able to pass through [illegible]

[illegible] of Pfeffel's amanuensis, Billing, [illegible] when, in broad daylight, he passed over a spot in the garden where it was at length found that some person had been buried, as a skeleton was dug up from it? It appears that what, during the day, caused a mere shudder when he passed over the spot, at night assumed to him a luminous appearance, like the ghost of a lady suspended in the air, her feet a hand-breadth or two above the soil, and which so terrified him that he durst not follow his blind master, "who then went up to the place where the figure was said to be, and struck about in all directions with his stick, besides running through the place of the figure; but the ghost was not more affected than a flame would have been. The luminous form, according to Billing, always returned to its original position after these experiments." The writer of a review of Reichenbach's abstract, which has lately appeared, speaking in reference to this point, suggests that, as decaying remains of brutes may be supposed to undergo similar chemical changes to those of human beings, by burying animals in some open fields, and leading the sensitive to pass over the spots, whilst they had no notion of any such deposits having been made in there might determine the fact much better than taking them into a grave yard. I think this a suggestion well worthy of being resorted to; but still I should consider it very unsatisfactory if performed without precautions being taken to guard against impressions on the olfactory organs. Indeed, the chemical emanations, when much concentrated, may even affect the respiratory organs, and excite unpleasant feelings, and might thus recal impressions and ideas which had previously been felt in some grave yard.

But I may be met with the objection to my arguments by an appeal which has been made to the Daguerreotype, which could not be influenced by mind; for an experiment has been recorded where the mere exposure of a sensitive plate in a box with a magnet, all light being excluded, an impression had been made as if it had been exposed to a feeble light, which did not happen when another plate was so confined *without the magnet*. It appeared to me that such an important deduction ought not to have been arrived at from one or two experiments of such a delicate nature, and more especially so when the iodised plates were *so long kept before being exposed to the mercurial vapour*, for it was natural to expect some chemical change to take place *independently of light*. I have since repeated these experiments with nine plates, prepared by Mr. Hickers, the patentee of the Manchester Photographic Gallery, with the greatest care, and the experiments, varied so as to guard against error by mutual correction. The weather was most propitious. The experiments have been tried by close and free exposure of three plates to the poles of a powerful horse-shoe magnet, of nine elements and 80 lbs. lifting power, and of other three similarly situated, only with two sheets of black paper intervening to intercept the rays of light, if any were emitted from the magnetic poles, and another was enclosed in a box at a distance from the magnets, and all kept from 66 to 74 hours, but in no instance was there any appearance of their having been acted on by light, the only change being such chemical changes as generally arise from keeping prepared plates for some time before being exposed to mercury. Two other plates were enclosed in a camera, and exposed at such a distance as must have given a picture of the poles of the magnet, and flames issuing from them, for the camera was adjusted to four and a half times the distance of ordinary light, and one left 66, the other 35½ hours, but no such indications manifested themselves. I think, therefore, that I am warranted in concluding that no light capable of affecting an iodised plate is given out from the poles of magnets, as alleged from the experiment referred to by Baron Reichenbach. Mr. Dancer, the optician, kindly lent me what apparatus I required, and saw and approved of my arrangements as well calculated for eliciting the facts of the case.

[illegible] said by Baron Reichenbach that the sen[illegible] detect water which has had the [illegible] passed through it, by having an [illegible] brought over and in contact with the opposite sides of the glass in which the water is contained. I have tried this experiment in such a manner as was calculated to guard against various sources of fallacy which I knew were likely to mislead the unwary; such as the varied tone of voice, or look of the experimentalist, when investigating the subject, and trying to elicit from the patient his candid opinion as to the qualities of each glass of water. The results were, that none of the patients tried could detect either by smell, taste, or any other sensible effect, any difference between the magnetised and the *un*magnetised water. At each trial I made use of four similar glasses, filled to the same same height, two of which, by the contact to the glass of a powerful magnet for a minute or two were magnetised, the other two not magnetised. The patients were all first tested in this way when awake, and then when asleep. Magnetising by passes, or breathing on the water, I should not consider a fair experiment, and for this reason, that the *halitus* of the breath, or from the skin, might very readily be detected by a highly sensitive patient, by *smell*, and *probably also by taste*. I have met with a patient who could very readily detect water so treated from that which had not, and I ascertained that she did so by *smell*.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS PANSON, Esq., of St. George's Hospital.

SURGICAL CASES.

CASE I.

Case of Popliteal Aneurism.

William Pearman, aged thirty, hairdresser — admitted by Mr. Keate.

Jan. 9. In the popliteal region of the right leg there was found to be a tumour, well defined, rather larger than a pigeon's egg; soft, and obscurely pulsating to the touch. On making pressure on the tumour, and at the same time on the femoral artery above, its contents were almost entirely pressed out; and immediately on removing the pressure, the tumour rapidly refilled, communicating a thrill to the hand, with distinct pulsations synchronous with those of the heart, and causing a slight bruit de soufflet to be detected with the stethoscope. The pulsations were also increased by making pressure on the distal side of the tumour. The superficial veins of the leg and foot were enlarged: and there was slight œdema of the ankle.

The patient states that for several weeks he had observed a slight aching pain in the right ham; but that for the last fortnight the pain has been more severe, and during this time he has observed a swelling at the seat of pain, small at first, but gradually enlarging up to the present time. He complains now of much increased pain at the part, of a throbbing kind, with numbness and and coldness of the leg and foot. He does not remember to have had any blow there; nor is he in the habit of making any extraordinary exertion. He is sometimes troubled with rheumatism; and is not of a strong habit of body. To remain quiet in bed.

12. A tourniquet, constructed so as only to make pressure on the two opposite sides of the limb, was applied against the upper part of the femoral artery; but it occasioned very great pain, and as it did not at all diminish the pulsation in the tumour, it was taken off.

Haust. morphiæ acetatis, ʒ jss, omni nocte.

16. The swelling has now increased two or three inches; the œdema is much greater; and the veins of the leg have become larger. The patient describes the pain as being intolerable; no relief being afforded by the draughts.

17. To-day Mr. Keate made an incision in the upper part of the thigh, about five inches below Poupart's ligament, in the situation of the sartorius muscle, and rather to its inner side, through the skin, fascia, and cellular tissue, down to the sheath of the femoral artery [illegible] for a *small* extent only, and an aneurism needle armed with a ligature, was then passed under the artery, between it and the vein; the ligature was tied *firmly* round the artery, with a reef knot; the ends were left hanging out of the wound, the edges of which were brought together with strapping, leaving an aperture in the situation of the ligature.

18. There is now no pulsation to be felt in the tumour, which is considerably diminished in size. The heat of the leg is rather below that of the rest of the body. The patient describes the pain as being much less severe; says he has a tingling sensation in the leg. Passed a comfortable night; has no thirst; pulse natural. Leg to be wrapped in wool.

19. Leg much warmer; no pulsation in tumour; pain is leaving him. No thirst; tongue clean; bowels regular.

22. Healthy suppuration is established in the wound; the tumour has very much diminished, and feels firm to the touch; the limb is warm; the enlarged veins, and the œdema have subsided.

27. Wound healthy; no pain in ham.

Feb. 2 The ligature came away to-day, being the fourteenth day from the time of the operation. Tumour decreasing; leg natural temperature.

4. A small bag of matter has collected in the cellular tissue a little below the wound; it was easily pressed out, and a small pad applied over it to make its sides cohere.

8. The discharge is small, and quite healthy; the wound is rapidly filling up with granulations, the tumour has decreased to one-half its former size, and feels quite solid. An indistinct pulsation may occasionally be felt along the sides of the knee-joint, from vessels of small size; health good. To get up.

11. The wound is now quite cicatrised; the tumour rapidly diminishing; health good. To go out next week.

REMARKS.

The most frequent cause of aneurism is chronic enteritis, and perhaps the rheumatic diathesis may predispose to this change, causing the internal coat of the vessel to become thickened, spongy, and rough; and the deposit of a steatomatous or atheromatous matter between the middle and internal coats. This causes ulceration in them, and a disposition to crack, which, when it has happened, does not admit of plastic reparation, on account of the diseased state of the vessel. The blood then pushes out the external elastic coat into an aneurismal swelling; perhaps after a time this coat may become absorbed, and the blood will then be bounded by the cellular sheath. It very seldom proceeds from external violence, unless the coats have been previously diseased.

I apprehend that there must have been some ulceration or crack in the coats of the vessel in this instance. No external violence seemed to be associated with its origin. Indeed, violent extension of the leg, with a sound artery, will never cause it, because laceration cannot happen unless the extension be made in such a degree as to rupture the ligaments of the knee-joint.

Aneurism is more frequent in large than small arteries; and more so where they describe a curve, as the arch of the aorta, or where they bifurcate; because the impetus of the blood is greater in these parts; or, rather, in its natural attempts to flow on in a straight line, it is driven with greater force against the convex part of the arch.

It is of very frequent occurrence in the ham, it has been said, because it is unsurrounded by muscles, and is much exposed to external violence (as in postboys). But there must have been previous disease in the vessel to produce it. In the case of postboys, it is much more likely that it happens from the sudden stretching of the leg after many hours relaxation than from direct violence applied to it. They are also generally an intemperate set of people, subject to rheumatism, and therefore more predisposed to arterial changes. Laceration of the middle and internal coats of a sound artery can never be its cause, for on applying a ligature we cut through both these coats, and yet no aneurism follows.

There are two principal varieties of aneurism the *true*, which arises from [illegible] coats of the [illegible]; and the [illegible] wound, or ulceration [illegible] several varieties, if the [illegible] coats be lost in the sac, it is called [illegible] if the blood dilates the outer coat fo[illegible] down the tube it is a dissecting one; but if the blood should get into its proper course, lower down, through another aperture, it is called "double dissecting;" the "diffused false" aneurism is when the blood gets effused into a limb, after rupture of all the coats, as happens after injuries; but if the surrounding cellular texture should become agglutinated together by adhesive inflammation, so as to form a sac for the blood, it is a "circumscribed false" one.

Aneurisms generally commence as small, painless swellings; but as they enlarge they may cause excessive pain, and great interruption to the circulation by pressing on the adjoining nerves and vessels, as happened in the present instance, causing a sense of coldness, numbness, and œdema. The tumour is at first soft, with fluid blood, and easily emptied by pressure; afterwards it becomes hard, from the deposition of coagulated fibrin, and pulsation either becomes very obscure, or altogether ceases. As it enlarges, the pressure causes the absorption of all the surrounding textures, muscles, cartilage, even bone cannot resist it. At last it approaches the skin, for a short time perhaps its progress may be arrested by strapping, so as to counteract the pressure from within, but at last the skin becomes soft, and of a dark colour, a slough then forms, and on its bursting the patient bleeds to death; the same process happens when it bursts into a cavity lined by a mucous membrane, but when it bursts into a serous cavity, the tunics become thin by distension, and then burst by a fissure.

The formation of a clot begins by some of the blood getting out of the direct line of the circulation, behind the ruptured tunics, and there depositing a layer of fibrine on the walls of the sac. This deposit enlarges by successive layers, and, in some rare cases, may entirely fill up the sac, so as to effect a spontaneous cure; still more rarely, the coagulum may extend into the artery, and obliterate it to the next collateral branches, or an abscess may form in the clot, causing inflammation of the artery, and subsequent obliteration. The same thing may occur when gangrene happens, if the powers of the patient are sufficient. Occasionally, also, the aneurism, from its direction, may press on the artery above, and cause obliteration; or an enlarged gland, or other tumour, may compress the artery. The aperture of communication between the vessel and the cyst may become closed, from the impaction in it of part of the fibrinous mass. These spontaneous cures, however, are very rare, and must never be trusted to in practice.

The first formation of the tumour in our present patient was not painful to any great degree, because it had not attained such a size as to press on the popliteal nerve. It could also be felt to pulsate; pressure on the femoral artery and on the tumour emptied it completely, and on taking away the pressure the blood immediately re-entered with a peculiar thrill, and a blowing noise. As the tumour enlarged rapidly, the pain became excruciating, the leg and foot became œdematous, and the superficial veins enlarged, showing that its pressure was obstructing the superficial veins and lymphatics. The pain increased, and became so great that morphine could not procure him rest. Pressure was then tried, but as it could not be borne long, and as it produced no diminution in the tumour, but, on the contrary, it continued to enlarge, Mr. Keate tied the femoral artery above.

As to the diagnosis It could not be abscess, because the symptoms denoting the formation of matter were not present. It was also slower in its progress than the pointing of an abscess. Had it been a tumour receiving an impulse from the popliteal artery, pulsation would have ceased on pinching it up from its connection with the artery; or on pressing the femoral artery, its pulsations would also have ceased, but it would not have become flaccid or disappeared, as in this aneurism. Fungus hæmatodes before bursting sometimes pulsates, and may be partially emptied by pressure, but it does not re-fill so quickly, and is wanting in the bruissement of aneurism.

In treating aneurisms, especially popliteal ones, pressure on the tumour itself used to be made, so as to endeavour to make the sides of the pouch cohere by adhesive inflammation; but it seldom or never answered because the coats of the vessel, being previously diseased, were not in a fit condition to take on the adhesive inflammation; also, if the tumour be painful, or the pressure be applied to the whole circumference of the limb, it is pernicious; and if the pressure be applied below the ruptured point in the vessel, it would only increase the size of the tumour. The pressure adopted in our patient was much more likely to have succeeded, because it was applied where the vessel was sound, and was not applied all round the limb, so as entirely to block up the circulation. It was not employed with a view to produce adhesion of the compressed part, but only so as to moderate the circulation in the aneurism, and favour solidification. This, however, is always a work of time, and requires perseverence on the part of the surgeon, and fortitude on that of the patient.

In our patient the pain continued so severe in the tumour itself, and the pressure did not at all obstruct the flow of blood through the tumour, that the other remaining remedy was employed—the one which has helped to immortalise John Hunter, as he was the first to propose and employ it in this country, viz., that of applying a ligature above the disease, where the artery was sound.

The place chosen for the operation was about five inches below Poupart's ligament. Hunter used to tie it lower down, but here it has the advantage of being more superficial, and being farther away from the diseased part of the artery. It would not, however, be prudent to tie it any higher up, for as the profunda femoris is given off about an inch and a-half below Poupart's ligament, there would be great danger of secondary hemorrhage on the separation of the ligature.

In applying the ligature, great caution is necessary not to include the femoral vein, or crural nerve; and the artery must also not be separated from its surrounding connections, more than is just sufficient for the passage of the ligature round it; for if it is, the ensuing inflammation may be too high, and occasion secondary hemorrhage, or its connections with its own vasa vasorum may be cut off, and thus also the reparative process prevented. The ligature was tightly tied, so as to occasion the division of the middle and internal coats; and by approximating them, the passage of the blood through the artery was completely stopped.

Had the artery been found inflamed it would have been no objection to the operation; in fact, it may be tied at any time before the commencement of mortification.

Had it been at all ossified, a somewhat larger ligature would have been employed, and it would not have been drawn quite so tight, for fear of cutting through the external coat.

The ligature came away in fourteen days, which is the usual time for it to remain in large arteries; in smaller vessels it usually comes away in a week.

After the operation the limb became colder than natural; but in a day or two its temperature was raised above the natural standard: this was on account of the circulation being principally carried on through the vessels of the skin. Sir A. Cooper once left a patient, on whom he had operated, in the care of his dresser, who, thinking that the heat of skin which ensued, was from inflammation, applied ice, and thus entirely stopped the circulation; mortification ensued and the patient died.

When an artery has been tied, the following effects are produced—The internal and middle coats are cut through, and brought into apposition; then adhesive inflammation takes place, whereby they are united, and the canal rendered impervious. A small coagulum is then formed just within the artery, which becomes larger by successive depositions, and at last it extends up to the nearest collateral branch; then ulceration of the external coat, with escape of the ligature takes place; there is a determination of blood to, and enlargement of,

the collateral branches, both above and below, the whole of the vessel between which points becomes impervious. After a time, the vessel's calibre diminishes very much, from the fibrous coagulum becoming absorbed.

The effects on the aneurism are—subsidence of the swelling; stoppage of pulsation, and gradual induration. The tumour afterwards slowly disappears by absorption.

Gangrene seldom occurs after the operation, unless, indeed, the patient be very old and debilitated; or unless the principal nerve be cut across, or included in the ligature; for nature can repair the loss of one of her means of preserving life, but when the two are destroyed it is beyond her powers of reparation.

MANCHESTER EYE HOSPITAL.

By A. W. CLOSE, Esq., Grosvenor-street, Manchester.

Contracted Pupil with Opaque Capsule from Iritis.—Operation of Keratonyxis and subsequent Extraction.

Christopher Riley, aged twenty-nine, from the neighbourhood of Chorley, admitted under the care of Mr. Walker, October 1st, 1845.

On admission both eyes were affected with chronic inflammation, that in the left being confined to the cornea and external tunics, whilst that in the right was located almost exclusively in the iris and capsule of the lens. By a combination of internal remedies, consisting of mild purgatives and calomel and opium, with the external employment of belladonna to the right and stimulants to the left eye, the inflammatory action was subdued, leaving in the left a central opacity of the cornea, and in the right an opaque condition of the capsule, with a very contracted pupil. With the left eye he had moderate vision, somewhat obscured by the central opacity of the cornea; but with the right he could only perceive light, and a dim outline of objects.

30. In the condition above mentioned, it was deemed advisable to resort to an operation on the right eye. Having been removed to the operating-room, he was placed upon a sofa, with his head suitably raised, Mr. Walker being seated on a stool at a proper elevation behind him. A large cataract-needle, of the ordinary spear shape, was passed through the anterior chamber perforating the cornea at its outer margin (keratonyxis), into the centre of the pupil, so as freely to lacerate the capsule as well as the cystalline body. A belladonna plaster was then applied over and around the eye, and the patient removed to bed.

Nov. 4. He has had very little pain until last evening. The extract of belladonna has been kept constantly applied to the eye, and he has taken a mild aperient every other morning. Small portions of opaque flocculent lens are perceived coming forward through the pupil into the anterior chamber, the pupil being much contracted, but not more so than previous to the operation. To-day he complains of rather acute pain in the eye, and there is much intolerance of light and lachrymation. There is also considerable vascularity, both orders of vessels, superficial as well as deep seated, being highly injected. Ordered six leeches around the margin of the orbit, after the leeching to apply an evaporating lotion. Take two grains of calomel and half a grain of opium every six hours. Omit the use of the belladonna.

6. The inflammatory state of the eye remains undiminished, portions of the lens floating in the anterior chamber, and apparently adding to the irritation. It was now determined to extract the broken-up lens from the eye. This was done by puncturing the cornea at its outer margin with the "*grooved needle* knife" (vide last vol. of *Med. Times*, p. 194), when the softened lens immediately escaped, leaving the pupil quite clear, and the patient able to see distinctly. A belladonna plaster was again applied over the eye, and the patient removed to bed. In the evening, the pain being severe and of a pulsating character, and the inflammation very acute, he was bled from the arm ad defectionem animi, which followed the loss of about eight ounces of blood. A draught, containing thirty drops of tinct. opii, was administered, and an evaporating lotion ordered to be applied locally.

The after treatment was conducted on antiphlogistic principles. The inflammatory action continued in a mitigated form during the succeeding two or three weeks. Leeches were once again applied around the eye, and an open blister established in the nape of the neck. An opiate draught administered at bedtime, occasionally afforded considerable relief. A slight degree of ptyalism was likewise induced and prolonged.

It ought to be mentioned that this patient possessed a decidedly strumous diathesis, hence a greater amount of inflammatory action than is usually met with after this operation. The case, however, terminated very satisfactorily, a useful degree of vision having been restored, the pupil remaining somewhat contracted, but quite free from opacity.

Staphyloma.

June 10, 1846. To day Mr. Walker removed a staphyloma from the right eye of a patient from Oldham. The operation was performed by pushing a bistoury through the centre of the cornea, from the temporal to the nasal angle, and cutting out directly downwards, this was followed by the escape of limpid fluid, and the lens. The operation was then completed by laying hold of the flap of the cornea with a pair of forceps, and snipping it off with the curved scissors. The eyelids were then closed with slips of goldbeaters'-skin, and the patient ordered to keep himself quiet, and to apply an evaporating lotion.

13. The patient presented himself to day, relieved from the unsightliness and irritation produced by the staphyloma, and less liable to the superinduction of inflammatory disease in the sound eye.

GENERAL HOSPITAL, JERSEY.

By G. M. JONES, Esq., Surgeon to the Hospital.

M. A. Wren, aged thirty-one, having by no means an unhealthy appearance, was admitted into the General Hospital on the 5th of August, 1845; she had been under medical treatment for a few days prior to her admission, and gave the following history of herself, and the gentleman under whose care she had been fully corroborated it. Her health had invariably been good, with the exception of a few weeks before each confinement, when she experienced distressing attacks of an hysterical nature; she had had three living children and two miscarriages, and at the period of her admission was between six and seven months pregnant; the catamenia first appeared when she was eleven years old, and had continued regularly ever since, nor did it subside during the period of suckling; her habits had been uniformly sober and temperate, and her whole life one of activity. Within eight or ten days after coming to the hospital, she had undergone much distress of mind, attended by considerable fatigue of body, and during one very wet evening remained seated for more than an hour on a cold stone, exposed to the inclemency of the weather. On the following day she had several rigors, which she thought little of at the time, as they were unattended by either fever, pain, or loss of appetite, but within twenty-four hours she complained of an aching sensation about the right wrist, which was almost immediately followed by swelling, heat, and excruciating pain. Many remedies were employed, but without affording any relief, and on her admission the following symptoms manifested themselves. The wrist and back part of the hand were very much swollen, with increased heat, and attended with pain of so intense a nature as to resemble that arising from a violent neuralgic paroxysm; the least pressure on or near the joint, seemed, if possible, to increase its intensity; the constitution was much disturbed from irritative fever; the pulse varied from 120 to 135 in the minute; the tongue, though not much coated, was inclined to be dry; the bowels were regular, but for some days the stomach had often rejected the medicine administered and the food taken.

A number of leeches were ordered to the part affected; afterwards warm poultices and two pills, composed of equal parts of pil. hydrarg. and pulv. Jacob. to be taken at bed-time.

On the 6th there was no amelioration of the symptoms. The leeches had bled well, and the bowels had been freely acted on; the alvine secretions were natural, the pulse continued the same, and during the night, which had altogether been a sleepless one, there had been considerable retching and occasional vomiting; she complained of intense thirst, and described the feeling in her wrist as if the whole hand was squeezed in a vice; the pain was felt in the stomach, when that organ was pressed on. She was ordered to take, every three hours, a saline draught in a state of effervescence, and emollient poultices and warm fomentations to be constantly applied to the wrist. At six, p.m., every symptom continued the same, and the sickness having increased, draughts with prussic acid were ordered.

On the 7th the night had been no better than the former, and every distressing symptom remained unaltered.

From this period to the 12th she continued in the same state, notwithstanding the many and different remedies employed for the purpose of subduing the inflammation, lessening the pain, and procuring sleep; the irritability of the stomach remained unabated; topical bleeding, often repeated, seemed neither to lessen the swelling or afford even temporary relief.

It was during my visit on this day that she for the first time complained of pain in the middle toe of the right foot, which she said was quite as excruciating as that felt in the wrist. On examination I found the toe to all appearance labouring under the same affection, though the preceding evening there was not a symptom of disease in that articulation, but that which struck me most was a red superficial line which arose from midway between the thumb and fore finger, taking its course along the inner part of the forearm and arm, extending under the axilla, then running in a zigzag manner down the side over the trochanter, then along the inner side of the thigh, knee, and leg, and when within four inches of the ankle branched off towards the middle of the tibia, and terminated in a direct line with the affected toe. Although my endeavours to relieve the wrist had been so unsuccessful, still I considered myself as called on to employ those means generally resorted to for the purpose of subduing inflammation, my efforts were, however, unavailing; on the fourth day the pain left almost instantaneously, but in this short space of time disease had rendered the toe completely useless; it could be moved in almost all directions without causing any uneasiness to the patient, but the grating feel of the bones plainly showed it had now become worse than a useless member. During this period the hand continued much in the same state as on the 12th, that is, the pain was so intense as completely to prevent rest, and the acuteness of the pain and want of the latter were evidently fast undermining a constitution which must naturally have been strong to withstand such prolonged and severe suffering.

On the 16th, from the violence of the inflammation, the peculiar elasticity of the part which communicated to the touch the feel of fluctuation, and the throbbing sensation, I was led to think matter had formed near or within the joint of the wrist; and as my friend Dr. Leigh, to whom I showed the case, concurred with me in this opinion, we decided on making a free incision along the back part of the hand; this was accordingly done, but there was not the least appearance of matter; the wound bled so very profusely as nearly to cause syncope; it was filled with lint, and rags constantly kept wet with a saturnine lotion were ordered to be kept applied on the hand and wrist. At nine, p.m., the symptoms were still the same: the bleeding had afforded no alleviation whatever; the bowels having been rather freely acted on during the day, an enema was given with tr. opii.

On the 17th, I found the opiate had produced no sleep, and the nurse informed me that during the night there had been, for the first time since her admission, occasional delirium; the pulse was very small, and 145 in the minute; there had been much retching and sickness during the last fourteen hours. Strong beef-tea, with as much pepper as she cou d

take in it, was ordered to be frequently given; and draughts, with camphor, cinnamon, and tr. card. every four hours. At one, p. m., she appeared more composed than she had yet been, and when I visited her in the evening the pulse was barely 120. She attributed this change to the wrist feeling easier. It was late when I saw her on the following day, but I was rejoiced to find her night had been, to use her own words, "a blessed one." She had slept at intervals an hour at a time; she also stated that, comparatively speaking, she was free from pain. I examined the wrist, and the same crepitating feel was discovered as in the toe (thirty-six hours before no sensation of this kind was to be detected). Her sufferings now became daily less.

On the 21st the tongue was perfectly clean, the pulse 90, and the appetite very tolerable. From this period to the day of her accouchement (November 23) her bodily health improved, but her hand remained almost powerless, and the toe perfectly so; both were, however, exquisitely sensitive.

REMARKS.

What could have given rise to a disease so peculiar in its character, and differing in so many respects from the ordinary affections of joints, can only be a matter of speculation. I was unable to discover that there had ever existed any particular idiosyncracy to any malady, nor could I trace any scrofulous diathesis, and the only cause which seemed to me assignable was, the exposure to cold having acted as a local stimulus when the system was probably more than at any other time susceptible of disease, in consequence of her advanced state of pregnancy and from mental excitement. Be the cause what it may, there were many marked features in this case which cannot fail to be interesting to the pathologist. This disease ran its course with a rapidity which baffled every attempt to arrest its progress, for no plan of treatment seemed to afford more than a very temporary alleviation of the distressing symptoms. It was one of those instances, which, as Brodie observes, "go towards an unfavourable termination in spite of whatever remedies are employed." Sometimes the pain appeared lessened by the application of anodyne poultices and emollient fomentations; at another time these seemed to increase its intensity; and cold lotions produced the same effect, at one period affording some apparent relief, at another augmenting her sufferings. Until the grating of the bones was felt, the pain was never intermittent, or in the least periodical, but continued the same with but very slight intermission. There were no nightly exacerbations, attended with either profuse sweating or greater heat than at any time during the day; oftentimes the pulse was less frequent at night than at other periods; throughout the pain was agonising, and seemed to her to be in the very substance of the bone. The gentleman under whose care this patient was before her admission into the hospital, regarded the disease as one of acute rheumatism; I also considered it in this light, and was, therefore, anxious to have followed up more than I did the use of colchicum, in consequence of the pain being of that "excruciating grinding" nature when, according to Sir B. Brodie, its administration becomes of essential benefit, but during the period when it might have proved efficacious the irritability of the stomach was so great and the retching so constant, that not more than one out of every four or five saline draughts and others, taken to remove these distressing symptoms, remained on the stomach.

The three cases mentioned by Mr. Mayo, in the Medico-Chirurgical Transactions, vol. xix, p. 101, are in some respects similar to the one I have attempted to describe. In the two first the pain came on suddenly, and subsided (as it in a great measure did in this case) spontaneously, but *anchylosis supervened*. In both cases remedies of an active nature were employed, and in both without success, or without producing any alleviation of pain. The third case mentioned by that gentleman bears a more striking analogy in consequence of the quickness of its termination: from the commencement of the pain and swelling in the affected joints to the time these were examined, not more than from eighteen to twenty days elapsed, and in this period the "extremities of the bones were found wholly bared of cartilage;" but in each of these three cases there was suppuration of the affected part, while in those I have been describing none took place. Allcock, in Injuries of the Joints, states, that he has known erosion of the cartilages take place in five days from excessive action following an injury, but here no injury preceded the disease, and *only four days* transpired from the first appearance of inflammation in the toe to its total destruction.

The affection of the toe is perhaps the most striking feature in this case, not taken as a disease of the part itself, but when considered in conjunction with the affection of the wrist, the pain in this articulation came on as suddenly—it was in every respect equally violent—the inflammation quite as great, and the termination the same—the one did not lessen in any degree the intense pain of the other; therefore the belief is often entertained that another and particularly a distant joint becoming affected, materially lessens, or entirely removes the pain in the articulation first attacked, is not borne out in this instance. The wrist, I may be allowed the expression, inoculated the toe; the red line already alluded to became the communicating medium of disease between two distant articulations; that this line did communicate a similar affection to the toe as the wrist was attacked with, can, I think, admit of no doubt, however strange and unaccountable it may appear, that whilst passing over some of the largest joints of the body, these should have escaped at a time when one of the last and most distant from the part first attacked should have become affected, and, in so short space of time destroyed. During the period the toe was inflamed there existed, independent of the pain experienced, the feeling (I quote the woman's words) "as if a thread was pulling the wrist and toe together, which if divided would instantly have afforded relief."

I have every reason to think that the disease of the wrist and toe was entirely local, and totally unconnected with any previous derangement of the system, for the affection of the former preceded by many hours, even by some days, any symptom denoting irritability of the stomach; the constitutional fever, sickness, &c., were symptoms arising from a local cause alone; all others seem to me attributable to the well-known laws of sympathy pervading the whole nervous system, by which distant parts often have the appearance of being affected, though in no manner the seat of disease.

REVIEWS.

Medical Notes on China. By JOHN WILSON, M.D., Inspector of Naval Hospitals and Fleets. 8vo., pp 267. London. John Churchill. 1846.

This volume consists of a summary of the experience of its author, whilst acting as chief medical officer of the hospital-ship Minden, stationed off the coast of China during the time we were at war with that nation. The work, as its title expresses, consists simply of notes, necessarily various and discursive, but at the same time thoroughly practical, and obviously the result of careful, candid, and discriminate observation. The opportunities of recording pathological and other facts were afforded not sparingly to Dr. Wilson, and it is but justice to him to say, that he has improved upon them with much industry, and with excellent judgment.

At page 4, we have a return of cholera cases, which particularly remind us of the worst forms of the disease, as we witnessed it some years ago in this country, viz., the absence of vomiting and purging, and sometimes of cramps, the patient seeming to sink from extreme and uncontrollable depression of the vital powers. The only post-mortem evidence at variance with this probable condition of the system being, curiously enough, an empty and contracted bladder. The cholera cases, as reported to Dr. Wilson, ran their fatal course in eight, thirteen, and ten hours respectively.

"In most instances there had been previous diarrhœa, or other form of gastric derangement, but it did not appear that there was any alvine discharge, either of fluid resembling rice-water, or fluid of any kind. In the words of the surgeon's report, the prominent symptoms were 'livid shrunk features; distressing sensation of heat at præcordium, thirst; in one or two, vomiting of matter like thin gruel. No purging, tonic spasm of muscle of abdomen, thighs, and legs, alternating with excruciating pain in the chest and arms; weak and contracted, or indistinct pulse. In Daniel's and Garnet's cases, the body and extremities felt preternaturally hot at, and even after, death.' It thus appears that the disease had some peculiar features, particularly of a privative nature. The absence of alvine flux in a series of cases of cholera is certainly uncommon. Vomiting, except in one or two cases, of matter like water-gruel, is not noticed among the prominent symptoms, and ejection from the stomach of a fluid resembling congee-water is a striking feature in malignant cholera, except in some cases where the prostrating power is so excessive as to destroy not only the expulsive, but also the secretory powers; and which does not appear to have been the case here, as venesection to the extent of from ten to thirty ounces was practised in most instances. The pulse was better than that ordinarily of the worst form of the disease, and there does not appear to have been the profuse sweating, with the deadly cold surface; nay, in two cases, there was morbid heat. There is no remark on the urinary secretion during the progress of the disease, but all the cases exhibited one of the most constant and striking of the post-mortem appearances of cholera—'In all, bladder contracted and healthy.'"

In proof of the filthy habits of the Chinese, and of their indifference to a disease which we are accustomed to regard as intolerably loathsome, an amusing anecdote is related by Dr. Wilson.

"A small party of English officers was entertained by a great man at Ningpo—so great, that if not the very highest, he was one of the chief mandarins of the province, which is one of the richest in the empire. He lived in a large house, was robed in silks and furs, the weather being cold, and was numerously attended by military and domestic retainers. The repast, which corresponded to English luncheon, consisted of a variety of viands, amounting to twenty-four, most of them new and nondescript, but many of them deliciously flavoured. The eating-room, one of a suite, was spacious; the attendants were numerous, attentive, and adroit; and appetite being good, everything was proceeding most pleasantly, when the writer was startled by the host, whom he sat next, turning up the enormous sleeve of his tunic, to show a thick surface of itch on his wrist, and call attention to the crop between his fingers. The affection was evidently one of considerable standing; and he made the exhibition without a feeling of its indecency, or that he was submitting contentedly to a sordid disease, of which he might easily have been cured." (p. 23)

Dr. Wilson gives us a very interesting anatomical description of a Chinese woman's foot. The opportunities of making a special investigation of this mutilated organ are not common in China, for which reason the observations generally made concerning it are far from accurate. From the pen of a skilful narrator the intelligence cannot fail to be interesting.

"Through the kindness of the surgeon of the Belleisle, who obtained the preparation at Chin-Kiang-foo, the subject, with a great many others, having destroying herself, the writer had an opportunity of examining the mutilated foot of a Chinese woman dissected, but with its natural articulations remaining, so that the bones retained the position they had occupied during life. It is that of a person from twenty to thirty years of age, and appears to have been of the ordinary artificial form, and nearly, though perhaps rather over, the average size; certainly the writer has seen several considerably smaller. Its extreme length is four inches and a half.

"The process by which the curtailment and deformation are accomplished, is, of course, pressure, but the manner in which it is applied, judging by the different accounts given of it, is not always the same. It must be forcible, and far greater than can be obtained from bandages, which are worn at all periods of life, and long after the growth of the foot is fully arrested, which is probably, in most instances, before the girl is five years old. The principal effects of the treatment are to prevent the proper development of the parts, distort the organisation, and in a great measure destroy the functions of the

foot. The extended sweep of the ankle, as well as the more limited motion of the metatarsal joints, is lost, the articulating surfaces being firmly anky-losed.

"In the preparation just seen, the os calcis, instead of its natural broad base, and posterior rough projection, has a conical form downwards, and slopes forward from the leg, so that a straight line projected beyond the foot, from the inner aspect of the tibia, falls not before, but behind the extremity of the bone. The bones of all the toes, except the great one, are bent under the metatarsal at their points of junction, lying parallel to, and in close contact with them. The natural arch of the foot is much deepened by pressure applied to its extreme points, and the forced elevation of the tarsal, and tarsal extremities of the metatarsal, bones. Its depth in the present instance measured from the inferior aspect of the bones, is fully two inches. Its depth of arch, in reference to the length of the foot, looked at as a skeleton, and without regard to its use, does not, it must be owned, give it an unsightly appearance. But the arch is not seen without dissection. It is so filled with fatty matter, that the sole is a flat surface; and the foot of a Chinese woman, in this respect, bears no resemblance to that of the Arabian, which, when helped a little by imagination, perhaps, allows the brook to flow through its hollow without wetting it."—(pp. 26—27.)

It appears, from Dr. Wilson's account, that intestinal worms are very common amongst the Chinese. He attributes their presence to the peculiar habits of this people, and to the depraved and sluggish state of the digestive organs which necessarily follows upon them. This is an interesting fact, because it corroborates the views at present entertained by the best pathologists concerning the etiology of vermination.

"There is a great disposition to the formation of intestinal worms, almost exclusively lumbrici, here (Hong Kong), as well as at Chusan, which are sometimes generated in extraordinary numbers, being occasionally voided by the mouth, but more commonly by the anus, and giving no symptoms of their existence till they are discharged. They are found in masses on post-mortem examination after fever and flux: the former as frequently as the latter, when protracted. Their extensive production has been ascribed, erroneously, it is believed, at Chusan, to the water found there, containing, as it sometimes does, portions of earthy and vegetable matter; for they are as numerous at Hong Kong, where the water is singularly clear, and free from admixture of any kind, except small quantities of mineral substances, which it holds in perfect solution, and which cannot be supposed to be conducive to such effects. There is little apparent difficulty in accounting for the abundance of these parasites in China. It can scarcely be questioned that the excessive tendency to, and occasional accumulation of them, arises out of the enfeebled, unhealthy condition of the alimentary apparatus, more particularly of the interior membrane. Being infested by depraved secretions, and coated with adhesive mucus, it ceases to perform its proper functions adequately, and from the same cause becomes the prolific bed of those creatures."—p. 193.

Such are specimens of the general features of this work, and of the useful practical facts with which it abounds. It possesses the rare merit of introducing to us a variety of information, both medical and miscellaneous, of a very novel and instructive kind. It is, in our opinion, eminently calculated to prove serviceable as well to the general as to the professional reader, and to both we recommend it with our best praise.

The French minister of public education has asked from the chamber of deputies an extra grant of money for the improvement of the faculty of Montpellier, and the School of Pharmacy in the same town. It is contemplated to erect a separate wing to the building, for an anatomical museum, a chemical laboratory, and a museum of physics. The government is expected to allow 138,000 francs, whilst the town will provide 20,000. The sum of 33,640 francs is required for the faculty of sciences, and the sum of 62,230 for the school of pharmacy.

TO CORRESPONDENTS.

Medicus *writes us a long article about the choice by the College of Physicians of Dr. Elliotson to deliver the Harveian oration for this year. Medicus enters into an able review of Dr. Elliotson's career, affirms that it has done as much honour and service to British medical science as that of any living contemporary, and that if any man under fair treatment from the press, or his own "misguided professional brethren," was likely to do honor to his calling, not before England only, but Europe, it was Dr. Elliotson. Our correspondent then proceeds to show that the disfavour in which Dr. Elliotson has lived with some medical men of late, originated solely in the vile calumnies of one who is no longer held to be worthy of credence, and that the College of Physicians in thus inviting Dr. Elliotson to their highest scientific honour of the year, have shown an anxiety to protect what is distinguished in their body, to treat the slanders of the worthless against their best members with marked contempt, and to maintain by every fair means an honourable feeling of good will and fellowship among the whole body. The pressure on our space precludes a larger abstract; but we have given the main points of Medicus.*

We have been requested by Mr. Cryan, one of our subscribers, to announce that Mr. R. Cryan has been awarded three Carmichael Premiums at the late examinations held in the Richmond School of Medicine and Surgery, Dublin.

Alumnus.—*We have not read Dr. Golding Bird's work on urinary deposits, but if any confidence can be placed in a review which appeared some time since in the Lancet, in which journal both the book and its author were very severely handled, it is not to be recommended.*

We have received the third annual report of the British and Foreign Institute, *the success of which, we are happy to say appears assured. The advantages of this establishment to science, by affording a point of union for scientific men from all nations, are obvious.*

M.R.C.S.—*The next examination at St. Andrews will take place on the first Tuesday in August. For any further information we must refer our correspondent to our last Student's Number.*

A Country Subscriber.—*The last meeting of the Royal Medical and Chirurgical Society for the present medical session took place on Tuesday. The meetings will be resumed in November.*

M.D.—*We have very frequently stated our opinions respecting the purchased German diplomas. By referring to our Gossip department a few weeks back, our correspondent will see that for the future the rulers of the University of Giessen have resolved to grant no degrees except on satisfactory examination. For this the profession may thank the* Medical Times.

A Sufferer.—*We never prescribe in the columns of the* Medical Times. *A sufferer should consult the nearest qualified medical practitioner, who would be quite competent to treat his case successfully.*

An Anti-Mesmerist.—*The case in question was clearly not proved, and the remarks of the judge appear to us to have been uncalled for. We place no reliance on facts certified to in the manner commented on by our correspondent.*

Mr. W. Holt's *paper on hemorrhage from the bowels during fever shall be published in our next.*

J. H. *is quite right that a lunatic asylum not managed as a prison must have more casualties than those conducted on the "iron rule" system, and that where there is no chance of an accident there is no chance of a cure; but under present circumstances we cannot find space for his communication.*

Numerous correspondents who have addressed us on the subject of an extra charge by the Post-office on their papers, are informed that the cause of complaint does not lie with us. If the evil recur we shall address the Postmaster General on the subject.

Swedenborg's Physiological Opinions.—*The promise to reprint the critique was unauthorised by us, and the performance would be against a rule in the management of this Journal.*

M.D. *inquires how much the Gazette ever gave for the articles for whose "copious piracy" compensation is demanded. Every contribution having been a gratuity, he contends that there was no legal copyright, and that for publishers receiving freely, not only refusing to give freely, but wishing to deprive the profession of a condensed summary of what it is useful they should know, is neither decorous nor just. Other correspondents have addressed us on the subject; but more has already been said on it than its importance warrants.*

The numerous letters on the Harveian oration require no notice, and indeed if they did, we have no space for it. Dr. Elliotson was always celebrated for his advocacy of Collegiate Amelioration and his enlightened views on medical polity, and if he again interest himself on those subjects, we do not see that any mischief can originate from it.

THE MEDICAL TIMES.

SATURDAY JUNE 27, 1846.

A chiel's amang ye, taking notes,
AND FAITH, HE'LL PRENT 'EM.—BURNS.

Pity the sorrows of a poor old journal.—PARODY.

We announced to our readers last week the amusing intelligence, that the proprietors of the Medical Gazette had charged us with having copiously pirated certain articles contained in their periodical—that they solicited us to make suitable restitution in the form of hard cash—and vowed vengeance upon us if we ever adopted anything from their columns again! It will be easily understood what amusement the communication afforded us—we were breathing a torrid atmosphere when it came, and were anything but in a laughing mood—yet the document tickled us so generously, we fell into a fit of "screaming" as hearty as Jonathan's, when he first sucked "sherry-cobbler" through a straw, and vowed that the old-fashioned stuff called nectar was soap-suds compared with it! It was a most unmistakeable laugh—loud, earnest, and lasting! We have not had such a "broad-grin" since the days of Grimaldi. Perhaps it was best fitting that the affair should end thus—the intelligence in laughter, and the document in smoke—but we have something of a kindly feeling, not unmixed with pity, towards the Gazette, despite its unhappy jealousy, and as we have enjoyed its joke, we now proceed to offer it a gratuity in the shape of a few words of advice and consolation.

To begin by advising with it, we are sorry to find that the Gazette cannot keep its own counsel. That it has long been in a state of decline, and is now on the verge of decease, is a fact that we are not singular in being in the possession of; but still there was no necessity, nay, no excuse, for telling the doleful tale to everybody—and we are both surprised and grieved to find the Gazette reckless enough to publish its own infirmities. But more especially do we regret that a contemporary, which we have hitherto considered to have some claims

to respectability, should attempt to bolster itself up at another's expense. Pauperism is none the worse for a little timely prudence, and is seldom unrequited for a little manly propriety. A beggar may ask alms and his suppliancy not demean him—if he have sunk without dishonour, he may be succoured without disgrace. But the mendicant with falsehood on his lips, we are accustomed to call a cheat—detected in his roguery, he generally pays tribute on a treadmill. If a man meet you in the street, and under some pretext or other claim half-a-crown which you do not owe him, what is the trick called in a court of justice?—obtaining money under false pretences—and its punishment is not trifling. What would be thought of a fellow, who, hearing a jest told in a room, said to the teller, "Sir, that joke is mine; Popkins made it, and gave it to me; you have no business with it, and I shall expect five shillings of you for its use?" Would not one of two noted infirmities be charged against him for ever? To take an illustration more immediately in point, what would be thought, if the editor of one newspaper were to run after the editor of another, soliciting compensation for having quoted from his columns some "brutal murder," "unmanly assault," or "impudent theft," recently committed? How many of our newspapers contain articles worth copying, that are not systematically published in all the others? Were this liberty of selection to be infringed, the whole newspaper press would stand still, and woe would betide the miserable sinner who dared meanly to interrupt the diffusion of knowledge!

We are most sincerely sorry to find the Gazette attempting to commit itself to such absurdity as this—still more sorry should we be if the extravagance were likely to be available. As regards the demanding a debt which we never owed, or purchase money for articles that were not worth buying—we are in pity disposed to look upon the melancholy act as an infirmity, and nothing worse; for we willingly acquit the Gazette of intentional dishonour. At the same time, we hope it will duly appreciate our forbearance, for were we to put upon the unhappy trick a different construction, we possibly might visit it with very different consequences.

Poverty need not make its subjects desperate so long as charity keeps in fashion—after all, straightforward suppliancy is better than its converse. We should have much more approved the conduct of our contemporary, if, in confessing, its poverty, which would be no news to us, it had asked a gift, or a temporary loan; and we are not unprepared to think that our purse, as well as our heart-strings, would have been loosened in its service.

As regards the value of the articles we have occasionally paid it the compliment of briefly noticing from its pages, the Gazette affixes no price to them—a circumstance we are sorry for. It merely says, do give us something in compensation, but it does not say what. We should have rejoiced had it named a specific sum. To have re-copied the articles would have been a sad sacrifice of time, and patience, and paper, and yet we would have suffered this penalty, just for the fun of showing the world what worth the Gazette imagines articles to acquire by passing through its pages. It would have been a curiosity in medical experience which, as a jest illustrative of self-sufficiency, would have lived for ever; for it so happens that we are pretty well acquainted with the reception that various papers have met with from other journals, before finding a burial-place in the London Medical Gazette. We have always regarded it as the most respectable cemetery extant for "rejected addresses;" and, but that we have no spare paper for the purpose, we could furnish plenty of evidence in proof of what we say. Occasionally, however, it has presented an article such as might have suited other medical journals, and on these memorable occasions we have placed it in the way of popularity, by quoting its name in connexion with its available contents. Instead of asking of us a payment in money for the condescension and compliment, it would have savoured much more of rectitude and gratitude, had the Gazette made us a worthy present for spreading its name where it was unknown before. To give it the benefit of an advertisement through such a circulation as ours, is a favour it ought to have been humbly thankful for. But so it is; gratitude is seldom obtained at the hands of those who most owe it you, and we blush when reflecting that our contemporary forms no exception to the rule.

The weakness of the Medical Gazette, of which it has long given the profession proof, and not without the customary consequences, was never more strikingly shown than in the communication we have before alluded to. If its complaint were a valid one, instead of being ridiculous enough only to provoke laughter, we do not know any journal from which that complaint would come with less grace than from our unhappy contemporary—for it is notoriously made up of odds and ends—little more than a "gatherer and distributer of other men's stuff." It is veritably a patchwork of "scattered facts and mutilated recollections." We are sorry to have to say so of it, but at least we have the excuse of having been prompted by it to the utterance of these unpalatable truths.

It is as much inferior to the MEDICAL TIMES in size as in valuable substance, and for that reason can only affect to compete with us in selection of medical intelligence; but *in a small way*, it does the best it can, in acts, which, when performed by others, it facetiously calls *piracy*. An odd number of it chances to lie before us—and it is odd enough that it should do so, for the said numbers are seldom wanted long, and we don't bestow upon them the expense of binding—it is the one for February 20th of this year. On looking it carefully over, we find that the communications proper to it, or *which are its own*, are *seven in number*, and there are, additionally, a leader, a review, and an anonymous letter! The grand total being *ten!* Of those that are *not its own*, such as translations, and selections from journals, &c., and quotations from all sorts of folks, even including Mrs. Hannah More, there are *twenty-two acknowledged, and three doubtful!** *Proh Pudor!* And in the face of such unblushing appropriation as this, to complain of our taking, about once a fortnight, or seldomer, a couple of columns from its vapid pages! That the Medical Gazette cannot rival us, is no fault of ours—we do the best we can for the profession, and are grateful for the reward we get—if our unfortunate contemporary fares worse, it is simply because it does not deserve so well; and the best thing it can do, will be to live (if it can?) and learn—to look at our example, and endeavour to follow it. In its enterprise of better conduct we heartily wish it success:—And as an old Latin axiom says, "the way to good manners is never too late," we hope that this "our lesser brother," though, perhaps, not long for this world, may have its life spared sufficiently to prove that it is not insensible to the desirableness of bettering its behaviour.

It has always been an opinion with us, and so it will continue to be, despite the onslaught of the minnowy tribe, that the next best thing to laying up knowledge is to lay it out. If we are prodigal of anything, it is of the gaining and the giving of information. Thank God! we can afford to be generous. We hope we shall never be childish enough to take a fit of the sulks, or cowardly enough to seek stealthy vengeance against a rival who may excel us in the noble enterprise of doing good! Should any such weakness or wickedness overtake us, we hope some friend will be found honest enough to put a stop to our unworthy vagaries.

For the MEDICAL TIMES, people are at liberty to use it as they will. It concerns not us to treasure up its articles, as old women do patchwork and crockery:—Whilst we believe them to be good enough to find a welcome everywhere, we are independent enough to care not into whose hands they fall. We are too much in earnest with the great enterprise before us, to pause in our race of success, by stopping to cavil with any idler who may desire to tempt us from our duty. The intellectual stock in trade which we are capable of commanding makes us indifferent who may be the borrowers or what the amount taken—we are only too happy to give, and to endeavour to follow each benefaction by a better. Were we to complain of those who commit literary larcenies upon us, we should be at war everywhere; for we can easily prove that we are more selected from than any other journal in the kingdom. Daniel Dancer never would allow a neighbour to light a candle at his, lest, in doing so, a particle of illumination might be carried away. We should esteem ourselves not a wit better than that dolted old miser, were we to fear that any fact to which we were privileged to give publicity, might lose its consequence by lighting a fellow-creature further along the labryinth of truth. This same TRUTH is what it becomes us all to strive for; and they are the happiest who gather the most, and bestow it most freely upon others.

What of this article applies to the amusing communication of our contemporary, is offered not detractingly, but in the hope of doing it good. The benefaction is needed, and we do not for a moment grudge the gift. If it work the reformation and benefit we hope for, our best intentions will be answered. The recent attack we have taken, of course, in joke, and have, therefore, treated it triflingly. Should it be repeated, and anything like impertinently, we will not promise what may be the nature of the shot we may fire next. This is a single gun, and a light one—we advise the Gazette not to dare a broadside—its effects may prove troublesome.

* Nearly three times as much borrowed as actually belongs to it.—*Proh Pudor!*

ACQUITTAL OF ELLIS.

It has been stoutly contended by some of our contemporaries that the acquittal of an English jury is to be taken as conclusive proof of the absence of crime, and should screen the accused from all further investigation or criticism. We have never concurred in this doctrine, and may, therefore, hope to escape the charge of inconsistency if we offer a few remarks on the recent trial for manslaughter of the person called *Dr.* Ellis.

The evidence, as submitted to our readers a short time since, showed two facts very conclusively;

first, that Dr. Ellis, though using a professional title, is not a professional man, and that a patient of his died under a treatment which the Medical Profession universally condemns as inefficacious and dangerous.

At the trial, which took place on Saturday last, no attempt was made to disprove either of these accusations; on the contrary, additional circumstances came out which made out both conclusions beyond a question. Yet the accused was acquitted by the jury without an instant's deliberation.

To what are we to attribute what may, at least by us, be called so extraordinary a result? There can be no doubt that the jury would be somewhat influenced by the circumstance that the deceased had been previously for a long time in a bad state of health, that he had for a long time reposed great faith in the virtues of the hydropathic system, which subsequently killed him, and that the *soi-disant* doctor had exhibited—unfortunately, be it said—no evidence of neglect or inattention. Still, these facts left the old conclusion wholly unimpaired that Dr. Ellis was no doctor, as he called himself, and that the treatment of the deceased was not only entirely unsuited to the disease, but the most likely in the world to produce the fatal result which followed it.

Are we then to have it laid down by our judges and juries as part of the law, or rather license, of England, that men may, with impunity, attract patients under false pretences of medical degrees, and indirectly cause their deaths by deficient or improper medical treatment? This is the great question which arises out of this unfortunate investigation. As far as the fact goes, we deny this to be the law—impugn the verdict of the jury—and insist that the legal acquittal has not absolved Ellis from the moral responsibility. We state broadly, that the law recognises in our profession the decisive authority of what is, and what is not, a case of *malapraxis*, and that when this authority distinctly shows that a death has originated in the ignorant medical appliances of a man, who lures patients to him under a false title, manslaughter or worse, is clearly and conclusively proved. In the trial of Ellis, therefore, we have no explanation for the result, save in supposing that the jury demurred to the medical testimony, and acquitted Ellis out of a doubt as to the scientific impropriety of the hydropathic practices. If this be the case, we must at once record our strong protest against this insult to our profession. If our opinions are not to be received on our own branch of science—if juries are to hang in suspense between their faith in heterodoxy and their acceptance of professional authority on a professional subject, we can see no good in our taking further part as professional men in medico-legal investigations. It is but inviting us to give our opinions to see them contemptuously rejected; asking us, like Pilate, "What is truth?"—and forthwith going away and not heeding our response.

But while claiming from the law that protection and preference, or rather justice, necessary to its own efficiency and good working, we have to bear in mind that the want of deference too often paid, both in the law courts and out of them, to our authority, may originate partially with ourselves. If we were less diligent in obtruding before the public in offensive terms our petty differences, personal or scientific—if we could unite more generally and act more systematically for the exposure of dangerous quackeries—if we were, finally, so banded together by a common interest and good fellowship in one institution giving an undistracted attention to the interests of all—we should appear on public occasions with a weight of *scientific*, and a respectability of *personal* influence, which must unteach the public many a distrust, and win a confidence for our opinions certainly not enjoyed in the present day. It is in this aspect that the governmental improvements so cordially advocated by us appear so desirable!

TRANSACTIONS OF LEARNED SOCIETIES.

PATHOLOGICAL SOCIETY OF DUBLIN.

Meeting of the 18th April, 1846.

[From our own Correspondent.]

Dr. LAW in the Chair.

Dr. Hutton exhibited a specimen of an ossified choroid coat; examples of ossification of the external layer of the retina had been presented to the Society on a former occasion by Dr. Smith; but in this instance the bony shell was contained between the layers of the choroid coat. The retina had no connection with it, but appeared quite detached at all points, except where the optic nerve perforated the choroid. It was to the extent of about half an inch around this opening that the choroid coat was ossified. The sclerotic coat was not diseased, but the cornea was opaque. The crystalline lens and vitreous humours were little altered. There was no sensible change in the appearance or structure of the other eye, except that the lens was somewhat of a yellow colour, but it retained its transparency. This patient was sixty years of age; the vision of the right eye had been totally lost for six years, that of the left was so much impaired that although he could make his way, he could not discern objects with any distinctness. He was admitted into hospital on account of a scrofulous disease of the ancle joint, combined with phthisis and tubercular disease of the peritoneum. He was far advanced in hectic fever, and died in a few days after admission. Extensive tubercular deposits and adhesions were found in the peritoneum; a large cyst apparently formed by organised false membrane, and containing serum, was observed on the surface of the liver. The lungs were studded with tubercles, and the ankle-joint presented the usual morbid appearances of scrofulous disease commencing in the cancelli of the bones, and which had advanced so far as to destroy their vitality. It is to be regretted that in this case no accurate account could be obtained of the symptoms which preceded the loss of vision in the right eye, and it is remarkable that in the left eye no morbid changes existed to account for so great an impairment of vision. The optic nerve was of natural size and appearance; there were no signs of diseased brain during life. This organ was not examined after death.

Dr. Lees exhibited to the Society a drawing which represented a section of a kidney containing a calculus; the morbid specimen itself he was unable to present, in consequence of its advanced state of decomposition. The drawing, however, he thought illustrated the case satisfactorily, and it was one which he considered interesting, not merely from the nature of the disease itself, but on account of its complications.

The subject was a man, aged forty-two, who was admitted to the Meath Hospital, labouring under chronic congestive bronchitis, and in a very debilitated condition. Upon further investigation into his history it was found that he suffered from pain in the region of the right kidney, that the urine was pale coloured and copious, albuminous and of low specific gravity, with a deposit of white gravel, and that he vomited every morning.

History.—The patient, a car-driver, aged forty-two, had been formerly a soldier, and contracted fever in Africa twenty-four years ago, followed by irritation of the urinary organs, for which he was discharged, and continued in good health until six years ago, when he passed a calculus, preceded by the usual symptoms, after which he enjoyed good health, till three months ago, when he became subject to severe pains in the feet, with cough.

This man, Dr. Lees observed, never had syphilis or gonorrhœa. The urine, as he had before observed, was abundant in quantity, though not too much so. It was pale, alkaline, albuminous, and of a specific gravity 1007. The diagnosis made was, the probable existence of renal phosphatic calculus, together with Bright's disease. He was put under treatment, but in a few days erysipelas of the head and face set in, and extended down the throat, the soft parts there being of a purplish, highly inflammatory hue, and the uvula œdematous. Diffusible stimuli and wine were administered; the cuticle began to desquamate, and the man appeared to be going on well, when he fell into a semi-comatose condition, in which he died. The brain was first examined, but was only slightly congested, there being no trace of inflammatory action. On turning to the abdomen, and examining the right kidney, there was found in it the small calculus now exhibited, the mucous membrane of the pelvis being a good deal inflamed, particularly in the situation of the calculus. The case, then, Dr. Lees considered exceedingly interesting in many respects. There was present extreme irritability of stomach—a symptom so characteristic of any mechanical impediment in the renal organs. Next, the nature of the calculus, which was composed of the triple phosphate and phosphate of lime. This combination of phosphatic calculus with Bright's disease was, Dr. Lees remarked, very rare. Moreover, it was to be observed that one of the many complications of the disease may be erysipelas, as in the present case. The subject was one of the most irritable tempered persons Dr. Lees had ever met with. He was eternally complaining, there being particularly well marked in him that peculiar nervous irritability so generally met with in the subjects of phosphatic calculi. The analysis of the calculus showed it to consist of the triple phosphate, with a considerable excess of phosphate of lime.

Dr. O'Ferrall would not occupy the attention of the Society for many minutes, the subject he was about to notice not being marked by any pathological fact of importance. The specimen on the table consisted of a number of ovarian cysts of various sizes, some very small, not exceeding the bulk of a small pea, others of prodigious size capable of containing three or four quarts. Some estimate of the bulk of the original tumour might be made when he stated that one of the measurements of the abdomen was four feet ten inches. The subject was a young woman, aged twenty, who had been married about two years and a-half ago, and had her first child in a year after. Shortly after marriage her abdomen began to enlarge, previous to which time her health had been perfect. One only of the cysts exhibited contained a different sort of material from any of the rest, and when first removed its resemblance to cerebriform matter was most striking; but the colour, Dr. O'Ferrall remarked, had now become a little altered. An analysis of this structure, however, showed it to have no analogy whatever to brain-like matter, but to consist of fatty matter combined with a considerable quantity of cholesterine, the micaceous scales of which were visible to the naked eye. The belly, as he had before observed, began to enlarge a year and a-half since, but the patient suffered no inconvenience, further than from the mere bulk of the tumour, till within a year of her death, at which time inflammatory symptoms declared themselves in the form of pain and tenderness at different points of the abdomen, and in this way the large tumour had become as it were glued, as revealed by the autopsy, to all the organs in the abdomen. With respect to the practice of extirpation in these cases, Dr. O'Ferrall considered, that before such a measure would be contemplated by any rational practitioner, the existence of adhesion ought to be determined; and this, in the present state of our knowledge of such matters, he hardly conceived possible; in the absence of such information, however, he would repeat that no such frightful measure as that of extirpation ought to be resorted to.

A special department of comparative anthropology is about to be established in the museum of Natural History at Paris. A considerable number of specimens have already been collected, and the museum is destined for a study of all the different races of man on the globe.

MISCELLANEOUS CORRESPONDENCE.

THE LANCET AND MR. HUNT.

(To the Editor of the Medical Times.)

SIR,—A certain vehicle of slanders (which is known as a *medical* journal much in the same way in which an exclusive dealer in physical poisons could be called a *medical* practitioner), has done me the honour of one or two of its vituperations. I did think, much as I had heard of the Lancet as the professed libeller of living worth, that my humble labours would have shielded me from its assaults. I have been mistaken, and have therefore to crave through the columns of the organ of the profession the privilege of exposing the causes and character of the injustice to which I have been exposed.

In two successive editorial articles I am elaborately denounced in the most opprobrious terms as "an itinerant empiric named Hunt," "a quack," &c., and medical gentlemen are condemned for supporting me in terms in which mildness and good grammar are equally set at defiance. The whole of the abuse and declamation rest, and avowedly, on the single circumstance that though not a medical man, I habitually practise the correction of vocal defects. No worse thing is even pretended as justifying pages of bombastic abuse. If this professedly scientific objection were the origin of the vituperations launched against me in successive numbers of that journal, I should meet it with a scientific response. I should reply that my calling was not medical; that it consisted solely in elocutionary practice of the voice; that it had nought to do with snipping tonsils, amputating uvulæ, or dividing genio glossi muscles; that there is neither surgery nor medicine in my practice; that in short, the sum of all my doings is that I *teach* correct speaking, and *read* pupils into correct speech. And if evidence were sought, of this truth I should content myself with saying that the Lancet accuses me of nothing worse, and with referring to hundreds of medical men who have never thought for a moment that mine was an invasion of their legitimate practice, citing especially the names of Liston and Dr. James Johnson, men as jealous of the true privileges of their profession as the most honourable practitioners breathing.

But the attacks on me, though made professedly on this flimsy professional pretext, ORIGINATE WHOLLY AND SOLELY IN PERSONAL PIQUE; and the *exposé* I now make, will show the profession what confidence is to be placed in the editorial articles of the Lancet.

Firstly, Sir, the elaborate vituperations that have been published as editorial articles against me, are written by a certain young M.D., called Tyler Smith.

Secondly: This Dr. Tyler Smith, late of Vigo-street, and subsequently and previously of I do not how many localities, is the brother-in-law of Mr. Yearsley, a person who has occupied public attention in his various capacities of dentist, oculist, aurist, and tonsil snipper. The Lancet itself has condemned his barbarous attempts to cure stuttering and stammering by severe surgical operations. The medical profession has, with one voice, condemned his operations. Mr. Liston, from personal knowledge of some of his cases, thus speaks of them in a letter to me, referring to pupils, my treatment of whom he had witnessed:—

"Some of these individuals had previously been subjected to painful and unwarrantable incisions, and had been left with their palates horribly mutilated, hesitating in their speech, and stuttering as before."

The *Medical Times* finally has pronounced this emphatic opinion on the gentleman:—

"Condemned by our duties as journalists to a general perusal of the daily and weekly newspapers, we have met with Mr. Yearsley's euphonious name so very frequently, in such singular company, and under such very peculiar circumstances, that we have been suffering for months under a morbid appetite for further acquaintance with the gentleman. While one column of the *Dispatch* or *Weekly Chronicle* has presented us with an advertisement so elegantly attractive, that we have almost regretted our having no aural malady which would enable us to add a fresh item to Mr. Yearsley's contributions to surgical science, we have seen, in another part of the journal, an editor or sub-editor's *disinterested* notice to some half-dozen *malades imaginaires*—for editors can create as patients as fast as their friends, catheter-surgeons, can kill them:—' that for all aural diseases the best gentleman to consult is Mr. Yearsley, who lives in such a street, Piccadilly.' A surgeon with such distinguished recommendations, whose name is as often before the public as those celebrities, Messrs. Goss and Co., Mr. Holloway, and Widow Welch, and who, rising one step even above the *Dispatch*, gets his contributions into the *greenhorn-book* courteously 'ycleped the *Medical Gazette*,' such a gentleman, we reasoned, contributing so largely—out of his pocket—to medical science—for let us frankly own that Mr. Yearsley is a great proficient in that important part of medical science—the knowing how to work himself into practice—such a one, we said, has a fair right to have his fame made known to every member of the profession, and is, therefore, peculiarly fitted for the pages of the *Medical Times*."

Thirdly: It has so happened that the success of my educational attention to stammering brought me, some years back in public newspaper collision with both Mr. Yearsley and his brother-in-law, in reference to their "unnecessary mutilations" of the palate, &c.

These facts premised, I have now to call your attention to the way—so *non-empirical*—so *very* professional—in which, as brother-in-law to Mr. Yearsley, and as practically editing the Lancet, Dr. Tyler Smith has behaved to me and the profession on this question of stammering. As the matter requires no comments, I shall confine myself to a few brief, but extraordinary facts.

FIRST PROFESSIONAL FACT: Dr. Tyler Smith, in 1842, gave his brother-in-law (the mutilating Mr. Yearsley) a public certificate in his own name, from Vigo-street, testifying for the *perfect* and *early* recovery of *two hundred* stammering patients of the said Yearsley! A useful certificate—the boldness of the panegyric it gives, and startling number of surgical miracles it bears witness to, ought to silence any objection as to the consanguineous disinterestedness of the source!

SECOND PROFESSIONAL FACT: Dr. Tyler Smith published, in 1843, "a *treatise* on the nature and causes of stammering"—(a "*treatise*" of *sixty-eight* pages), giving it to the world under the modest anonyme "by a physician." He was too diffident to give his name. To this "*treatise*," published by Highley, the following dedication is prefixed (without Dr. Tyler Smith's name, of course) *to his distinguished brother-in-law Yearsley.*

TO
JAMES YEARSLEY, Esq., M.R.C.S., &c., &c.,
WHO,
BY A NOVEL AND IMPORTANT CLASSIFICATION OF THE VARIETIES OF VOCAL IMPEDIMENTS,
AND BY
DEVISING ORIGINAL MEASURES FOR THEIR CURE, (MEDICAL, SURGICAL, AND EDUCATIONAL,)
HAS DONE
MORE THAN ANY OTHER MAN TO BRING THE SUBJECT WITHIN THE DOMAIN OF LEGITIMATE MEDICINE AND SURGERY,
THIS VOLUME IS INSCRIBED BY HIS FRIEND,
THE AUTHOR.

THIRD PROFESSIONAL FACT: This said Dr. Tyler Smith—the brother-in-law of this distinguished surgeon—the *useful* certificate-writer—the dedication manufacturer, becomes, in 1846, the editor, practically, of the Lancet, and turning all its influence, such as it is, to the service of his low pique and disappointed expectations, writes leading article after leading article to denounce me to the profession *for actually nothing*. This pure-minded, high-principled gentleman now pompously blusters because a person who has received his education in Trinity College, Cambridge, and employs his leisure hours in farming, devotes his abilities under professional sanction to the *management* of the human voice! Will the profession submit to be so disrespectably insulted? Will it suffer itself to be so disreputably outraged? Empirics there may be, and itinerant ones too, but Tyler Smith, of Vigo-street, M.D., and J. Yearsley, Esq., M.R.C.S., should not let the charge pass beyond their own family circle, unless on far better grounds than any I have yet seen furnished by them.

I am, Sir,
Your obedient servant,
THOMAS HUNT.

GENERAL MEDICAL ANNUITY FUND.

[To the Editor of the Medical Times.]

Sir,—From the interest which you appear to take in the success and welfare of the General Medical Annuity Fund, I am induced to venture the request that through the pages of your journal I may be permitted to address myself to the members of the profession on the subject. An advertisement appeared in your paper last September, stating that the Society was established; since then many gentlemen who stand in a high position in the profession have not only expressed, but have shown their desire for its success. Our first year closes on the 30th of this month, and any subscription remitted to this office after that day will be entered on the books of the Institution for the *second year*, and the subscriber will thus postpone for an entire twelvemonth those advantages which he would otherwise possess; it is, therefore, very desirable that those gentlemen who are desirous of becoming members of our Society should do so at once, and remit their subscriptions through a post-office order, or those who prefer paying their five years' subscription in advance, or making a donation towards the fund, can remit the amount either by post-office orders, or by forwarding to this office their cheque, which if drawn in favour of Mr. Daniell, and written across the face, "The Northamptonshire Union Bank," will come safely to hand.

Should any of your readers desire further information respecting the fund, I shall be most happy to transmit to them a copy of the rules and regulations; for far more full information than can be obtained in a private letter, I might refer them to Mr. Daniell's address, which can be had of any bookseller, through Mr. Churchill, of London, in which address they will find the object and advantages of the Institution described at length.

After the very efficient manner in which, two or three weeks ago, you referred to this Institution, it would be a waste of my time and your space for me to offer any observations of my own, I therefore content myself with r

Your most obliged servant,
JOSEPH STAINES.

Office, Newport-Pagnell, 13th June, 1846.

FELLOWS' SURGERY.

[To the Editor of the Medical Times.]

SIR,—It was with some satisfaction that I read an article in your excellent journal, a week or two since, condemning the unprofessional remarks which Mr. Holmes Coote, took an opportunity of making on a *confrère* while reporting a case of strangulated hernia in one of your contemporaries. I regret to see a man just entering life commence a public career by the unprofessional conduct you so ably exposed. One little fact in the case I wish to notice. Mr. Coote says, "*As she was not in a state to take medicine by the mouth, an enema was administered, which brought away a small quantity of fæcal matter.*" Would Mr. Coote inform me, as I am lamentably ignorant on the subject, *when*, in acute cases of strangulated hernia, medicines (purgatives?) *should* be administered by the mouth? I presume Mr. Coote alludes by the word "medicines" to purgative medicines, as in the next line he speaks of the exhibition of an enema, which brought away some fæcal matter. Now Sir, as a practitioner of many years' experience, and as one too who has had the treatment of not a few cases of strangulated hernia, I may be permitted to remind Mr. Coote of the well known fact in surgery, viz., that the administration of purgative medicines in such cases as the one described by him, would be positively injurious, and would endanger the patient's existence. The surgeon who could contemplate such treatment is certainly *not fit* for the ordinary exigencies of surgery.

A MEMBER, BUT NO FELLOW.

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted members of this college on Friday, June 19, 1846:—J. Rogers, W. P. Charsley, B. Butterworth, W. C. Cooksey, B. P. Matthews, E. Simpson, A. H. Parry, R. W. Ledward, G. C. Sharman, A. T. Mott, J. M. Bowie, J. B. S. Brown, W. Hurman.

APOTHECARIES' HALL.—The following gentlemen were admitted Licentiates on the 18th June, 1846:—William Henry Freeman, John Palmer, Rowland Lloyd.

APPOINTMENTS.—Dr. W. C. Tucker has been appointed supernumerary assistant-surgeon to the Vernon flag-ship, at Monte Video.

ROYAL COLLEGE OF SURGEONS.—The next examination for the fellowship of this college will take place in August next. It is stated on good authority, that the fellows will dine together with the council immediately after the annual election of officers in July next.

OFFICE OF ORDNANCE, JUNE 18.—Ordinance Medical Department. Surgeon Thomas Whitelaw to be senior surgeon; Surgeon Stewart Chisholm to be senior surgeon. Assistant-surgeon George Farr to be surgeon; Assistant-surgeon Charles Frederick Staunton to be surgeon, vice Whitelaw; Assistant-surgeon Johnson Savage to be surgeon, vice Chisholm.

INDIAN MEDICAL APPOINTMENTS.—Assistant-surgeon, T. L. Bell, to act as garrison assistant-surgeon of Fort St. George during the absence of assistant-surgeon Jerdon, on medical certificate, May 1st. Assistant surgeon B. S. Chimmo, to do duty as superintendent of surgeon's department in the ceded districts, April 23. Assistant-surgeon H. T. W. Harper, from 2nd battalion artillery, to do duty with detachment of 27th N. I., at Madras, to join. Assistant-surgeon A. Hunter, M.D., to act as zillah surgeon of Chuddepah, during the absence of assistant-surgeon Donne. Assistant-surgeon J. D. V. Packman, to be zillah surgeon, of Combaconum, May 1st. Assistant-surgeon W. J. Stuart relieved from duty in Indian Navy. Assistant-surgeon R. Millor, M.D., to do duty in Indian Navy, vice Stuart. Assistant-surgeon T. B. Johnstone at present on sick leave. Assistant-surgeon W. H. Pigou, appointed to 17th N.I., vice Hamilton, who proceeds to Europe. Super-surgeon Gray, on sick leave at present, and has applied for permission to retire from service upon his pension. Veterinary-surgeon G. E. Nixon, to Europe for three years on medical certificate. Assistant-surgeon Cramond, to Europe for three years on medical certificate. Assistant-surgeon W. R. Babington, and W. W. Hende, M.D., to do duty with Land Forces in China. Assistant-surgeon G. Smith, M.D., to do duty under superintending surgeon, Hydrapad subsidiary force. Assistant-surgeon J. Forster, to do duty under superintending surgeon of northern division. Surgeon E. Finnerty, M.D., removed to 49th N. I. Surgeon T. Key, transferred to 3rd Light Infantry, and appointed professor of chemistry. Assistant-surgeon B. S. Chimmo resigned his appointment at Bellary. Assistant-surgeon J. W. Fletcher appointed to do duty in Meerut division. Assistant-surgeon J. Bruce to be surgeon, vice Lightfoot, transferred to invalid establishment. Assistant-surgeon J. Macpherson, M.D., to visit Simla and hills north of Deyrah till September, on private affairs. Assistant-surgeon J. T. C. Ross, to hills north of Deyrah on medical certificate. Surgeon N. Wallich, M.D., to retire from service upon pension of £300 per annum. Assistant-surgeon A. C. Maclae, M.D., appointed to civil station at Burdwan. Surgeon J. Innes, M.D., appointed garrison surgeon at Chunar, vice Johnstone deceased. Assistant-surgeon J. H. Butter acting as assistant garrison surgeon at Delhi.

We extract the following opinion of our continental neighbours of the merits of the *Medical Times*, from a recent number of the *Gazette Médicale de Paris*:—"Although filled, like our own journals, chiefly with original articles, extracts, letters, criticisms, news, reports of learned societies, &c., the weekly medical journals, in England, contain, as a rule, a fundamental division into two parts—the first consecrated to scientific intelligence; the second devoted to the interests of the profession. Whilst in France questions of reform and of medical etiquette only interest accidentally—whilst a journal, which was *officially* established as the promoter and champion of the profession, was the first to abandon it as soon as the fashion was over—in England the goal is aimed at with a perseverance, which the *Gazette Médicale de Paris* has imitated a long time, but which has been by no means shared by the other organs of the French press. In the English journals, these subjects are not hidden in an obscure corner of the paper—on the contrary, from the extent of space and the situation they occupy, one may judge of the importance attached to them. With these articles the journal begins afresh (so to speak), and its title is repeated at the head of this second part, which is spread out so as to attract the attention of the readers. With an excess of precaution, a significant motto generally announces the subject of the article. Thus we read in the MEDICAL TIMES:—'Eheu quam temere in nosmet legem sancimus iniquam.' Under the heads of Parisian, German, American, and Italian intelligence, the best English medical journals give not only an analysis of the publications which appear in these countries, but an account of the recent events occurring in the principal foreign towns, of which they are constantly in formed by the gentlemen who act as their special correspondents."

The French Government are about to suppress the military hospitals of Saint Denis and Rue de Charonne, each containing 500 beds.

OBITUARY.—On the 18th inst., at Torquay, Mr. Thomas Hughes, late of Camberwell, surgeon, aged 38. Lately, at Paris, aged 92, Dr. Grandison.

Dr. Shrimpton, whose promotion in the order of the Legion of Honour we so lately noticed, is surgeon in chief of the hospital of Constantine, not of Oran, as we erroneously stated.

A surgeon has recently been appointed to attend the Carnarvon Union Workhouse, which has accommodation for 200 inmates, at the munificent wages of £10 annually.

PHRENOLOGY.—It has been asserted that the head of Lecomte, the assassin who fired at His Majesty the King of the French during the month of April, presented a considerable enlargement of the organ attributed to destructiveness, and of animal propensities in general; no opportunity has been given to phrenologists to ascertain the truth of the assertion, as the body was not given for dissection, and as no cast of the head was taken either before or after execution.

PARISIAN MEDICAL SOCIETY.—This institution, which has now enjoyed nine years of uninterrupted prosperity, held its annual dinner on Monday, the 15th of June 1846. The chair was occupied by Dr. Clancy, the President of the Society. The Baron Dubois and Professor Velpeau honoured a numerous meeting with their presence. After the usual loyal toasts, the chairman proposed the success and prosperity of the Parisian Medical Society, which was responded to with great warmth. The vice-president, Dr. Fleming, in a short and spirited address, proposed the former presidents, amongst whom he particularly alluded to Baron Dubois, Dr Ricord, and Dr. Mott. In returning thanks, Baron Dubois expressed his sincere wishes for the welfare of the Society, and his earnest desire to promote its interests. The president's health having been proposed by Dr Olliffe, and received with much applause, Dr. M'Carthy proposed the Medical Staff of the Parisian Hospitals, and the health of the distinguished guest of the evening, Professor Velpeau. In reply, the learned professor assured the Society that he deeply felt the compliment which had been paid him, and expressed his satisfaction at the manifestations of professional sympathy which he had witnessed that evening. He hoped that no untoward event should ever occur to destroy a cordiality based upon the best feelings of our nature, and so profitable to the cause of science. The medical institutions of Great Britain were next proposed by Dr. M'Lean, late of Lima, and after a few more convivial toasts, the meeting adjourned at an early hour, after a vote of thanks to the president.

The Chamber of Deputies have postponed the consideration of the laws relative to the Academy of Medicine of Paris until their next session.

The fourteenth session of the Scientific Congress of France will be held at Marseilles on the 1st of September next. The managing committee have just published a report of the proposed proceedings to which they wish to call the attention of scientific men of all nations. The duration of the session will be ten days, and the labours will be divided into six sections: the natural sciences, agriculture, the medical sciences, history and archeology, literature, the fine arts, education, philology, the physical sciences, and mathematics.

The typhus fever, which was so severe in the neighbourhood of Vernon some time since, has returned in great intensity; numbers are attacked, and several have died already.

The establishment of an Academy of Sciences at Vienna has given great satisfaction. The academy will have four sections—languages, history, the natural sciences, and *belles lettres*. The twenty-four first academicians will be appointed by the Emperor.

PROVINCIAL MEDICAL ASSOCIATION.—The Annual Meeting of the South-Eastern Branch of the Provincial Medical and Surgical Association will be held at Ashford, on Wednesday, the 24th instant. The Annual Meeting of the Yorkshire Branch of the Provincial Medical and Surgical Association will be held at York, on Thursday, the 25th instant. The Annual Meeting of the Newton Branch of the Provincial Medical and Surgical Association will be held at the Legh Arms Hotel, at Newton, on Thursday, the 25th instant.

The *Gazette Medicale de Paris* says that "the notorious" Morrison spent between the years 1830 and 1841, the enormous sum of £108,000 sterling, in paying for advertising his nostrum.

The Royal Medical Society of Toulouse has proposed the following subject, for a prize essay, to be granted in the year 1847:—"To describe the History of Eclampsia or the Convulsive Affection of Infants" "To describe the symptoms characterising it according as it is an idiopathic or sympathetic affection." "To deduce from this explanation, which must be founded on clinical observation, the rational indications of treatment." The prize is of the value of 300 francs.

By an order in Council, dated May 30th, H. M. the Emperor of Austria, on the proposition of Prince Metternich, has founded an Academy of Sciences in Vienna.

MORTALITY TABLE,

For the week ending June 20, 1846.

Causes of Death	Total.	Average of 5 summers	Average of 5 years
ALL CAUSES . . .	808	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	151	162	188
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	85	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	145	155	157
Diseases of the Lungs, and of the other Organs of Respiration	208	271	294
Diseases of the Heart and Blood-vessels . . .	32	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	93	65	72
Diseases of the Kidneys, &c.	6	7	7
Childbirth, Diseases of the Uterus, &c.	9	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	7	6	7
Diseases of the Skin, Cellular Tissues, &c.	[illegible]	1	2
Old Age	35	60	67
Violence, Privation, Cold, and Intemperance . .	30	25	26

No. 353. **SUMMARY** July 4.

PROGRESS OF MEDICAL SCIENCE

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of 22nd June, 1846; M. Mathieu in the Chair.

Ergotine in Hemorrhage, by M. Bonjean, of Chambery.—From the ergot of rye M. Bonjean has extracted two substances, differing very materially from each other in their nature and in their properties. The first is a fixed oil, in which seem to reside the poisonous elements of the ergot; the other is ergotine, a watery extract, to which M. Bonjean attributes considerable hemostatic virtues. This opinion is also common to M. Müller and Dr. Wright; but hitherto its correctness has been tested only on animals, and in them the great plasticity of the blood diminishes the value of the experiments. M. Bonjean has forwarded to the Academy a case of hemorrhage arrested by the ergotine in the human subject:—A stout woman, aged forty, wounded her hand, on the 5th of June, with the fragments of a glass bottle: a branch of the palmar artery was divided and profuse hemorrhage ensued, against which compression was of no avail. In the space of two minutes the application of the concentrated ergotine stopped the flow of blood, which did not afterwards recur.

Chemistry.—The equivalents of silver, potassium, and chlorine, have been hitherto calculated from the results of the analysis of the chlorate of potass. M. Maumené employs a new method, based upon the decomposition of the oxalate and acetate of silver, and finds the following equivalents, which differ only in a slight degree from those heretofore adopted:—Silver, 1390·42; chlorine, 442·04; and potassium, 487·78.

Experiments on Antimony.—M. E. Millon has forwarded to the Institute a series of experiments which prove, that not only the drug remains for a long time in the system after it has ceased to be exhibited, but also that it exercises a special action on the chylopoietic organs. In the dogs submitted to observation, the liver increased to three times its natural size; and one bitch took tartar emetic during five days only, and a fortnight afterwards littered several living pups, in the livers of which antimony was detected in large proportions.

ACADEMY OF MEDICINE.

Meeting of June 23rd, 1846; Dr. Roche in the Chair.

Election of a Member in the Section of Operative Surgery.—M. Malgaigne was elected, after a spirited contest, which had attracted a full meeting. The result of the election was received with general satisfaction. The unsuccessful candidates, MM. Robert, Vidal de Cassis, and Manec, all distinguished surgeons, obtained a respectable number of votes.[1]

THE PLAGUE.

M. Poiseuille would propose that, on leaving the infected ports, all ships homeward bound should be ventilated, and, if possible, fumigated several times a-day; he would also recommend that all cases of suspicious disease breaking out during the passage be placed in a temporary cabin erected on the upper deck. M. Poiseuille also insisted on the necessity of sufficient ventilation of the rooms in the lazarets.

M. Desportes thought that the commission should have proposed general preservative measures, such as the improvement of the French sea-port towns, the cleansing of the harbours, the strict observance of the rules of public hygiene, both in cities and in private dwellings, and the diminution of mendicancy. He was of opinion, that during hot seasons, when the wants of the population are greatest, government should ensure the distribution, at moderate prices, of nutritious substances.

Meeting adjourned at five o'clock.

HOTEL DIEU.

Clinical Lecture on Colica Pictonum, by Dr. Vigla.

On May 30, 1846, a man, aged twenty, a house painter, was admitted suffering from colica pictonum. Once already he had been affected with the same malady, a twelve month since, and was relieved in the space a week by the exhibition of a few purgatives and sulphurous baths. Two days before his admission he was obliged by violent colic to cease suddenly his occupation. The pain was excessive, and accompanied with incessant vomiting: he was accordingly brought to hospital, forty-eight hours after the occurrence of the first symptoms. The face was pale and sallow; the epigastric region tender; the abdomen flatter than usual; intense colic was present; the tongue coated; the vomiting continual. Two drops of croton oil in four doses were given in the morning, and in the evening an opium pill and a purgative enema. Notwithstanding relaxation of the bowels consequent upon the use of the medicines, the pain continued very violent up to the 8th of June, when he experienced some amendment. The purgatives and the opium were still exhibited on the 9th and 10th, when the most distressing symptoms entirely disappeared. It is not our intention in this lecture to draw a complete picture of the painter's colic, but to call your attention to the leading features of this interesting case. First, you will remark the unusually sudden invasion of the malady—in most instances the disease manifests itself gradually; the patient was, it is true, pale, but did not present the characteristic yellowish hue special to the complexion of those suffering from saturnine intoxication. Two pathognomonic characters are usually observed in colica pictonum: the intense abdominal pain, often relieved by pressure, and the retraction of the walls of the belly—a sign by which the present disease is readily distinguished from peritonitis. We will not endeavour to discover the cause of the pain. It is immaterial to attribute it with Gardane to the pressure of hardened *fæces* on the intestinal walls; with Astruc to irritation of the spinal nerves; with Mérat to spasm of the digestive organs, or to gaseous distension of the tube. It does not appear to us doubtful, that it must be referred to the nervous system of organic life, and perhaps it is rational to admit that it is the result of a sort of paralysis, attended with increased sensibility of the nerves presiding over the peristaltic and antiperistaltic motions. This view seems confirmed by observation of the mode of action of preparations of lead on other organs; thus, we find they often produce loss of voluntary movement in the limbs, which is often relieved by stimulants of nervous influence, like blisters and purgatives. The absence of tumefaction of the abdomen is also one of the most important symptoms of the disease. You will generally find the tongue coated, as in the present case; and around the neck of the teeth may be detected, in many patients, a black leaden deposit, often a valuable clue to the diagnosis. Is the constipation the *cause* of the pain, or is it only a result of intestinal paralysis? To this question the answer is difficult, if not impossible. As to the pulse, you will seldom find it rise above its natural standard. The duration of the complaint seldom passes one fortnight, particularly if the patients are removed from the poisonous atmosphere which has been the first cause of their suffering; but, precisely because they must resume their trade, relapse, or rather a recurrence of the disease, is extremely common. Indeed, it would seem that the first attack predisposes the patient to a second. Of the three great surfaces of absorption, the skin, the gastro-intestinal, and the respiratory organs, the latter are certainly the most active, and thus it is that the workmen most frequently affected are those who breathe an atmosphere loaded with particles of white lead. As to the intestinal surface, it is seldom through its agency that the poison is introduced into the system, although cases are extant of colica pictonum being produced in consumptive patients who have taken preparations of lead for the purpose of diminishing nocturnal perspiration: such cases, however, are far from common. We have seen Professor Fouquier give some patients as much as one scruple of acetate of lead without causing any morbid symptoms. As a preservative against the malady, it has been recommended to give to the workmen drinks acidulated with sulphuric acid;

[1] M. Malgaigne is well know to the scientific world by two very popular surgical works—viz., a treatise of surgical anatomy and a manual of operative surgery, both distinguished by great originality of thought and profound research. His introduction to the modern edition of the works of Ambrose Paré is looked upon as a chef d'œuvre of literary composition, and the *Surgical Journal*, conducted under Dr. Malgaigne's auspices, is one of the best circulated scientific periodicals in France. The new academician is, besides, remarkable for strong, good sense, a constant flow of ready wit, and a command of language which must speedily place him amongst the best debaters of the assembly.

but the plan has been proved by extensive experiments to have little or no influence as a preservative, and to be, on the contrary, injurious to the general health of the men. As to the curative treatment, the most efficient of all certainly consists in the exhibition of purgatives, and the famous method of La Charité consisted chiefly in drastic medicines. Narcotics have been recommended by Stoll, and are, after purgatives, most useful

CLINICAL LECTURE ON ANEURISM OF THE BRACHIAL ARTERY, BY PROFESSOR BLANDIN.

We have lately performed in your presence, Gentlemen, ligature of the brachial artery, for the cure of an aneurism produced by a wound of the artery during venesection. The operation has proved successful, and we will take this opportunity of calling your attention to the peculiarities of this case, and also to the most important points of the subject. The tumour, although produced by a wound, presented the characters of the false circumscribed aneurism, no diffusion of blood having taken place in the cellular structures. Compression of the tumour had at first reduced it so far that the case was pronounced to be cured; but, a short time after, the swelling not only regained its former size, but appeared to increase. The patient was brought to hospital, and ligature of the brachial artery was resolved upon. The method employed was that of Anel, which has been improperly attributed to Hunter, although the case on which Anel operated was one exactly similar to the present, in which he tied the brachial artery for the treatment of aneurism at the bend of the elbow, without opening the tumour. Hunter did nothing more than this.[*]

We carried our first incision along the internal edge of the biceps, and, after dividing the aponeurosis, the median nerve was slightly denuded, and pushed aside. This nerve is usually placed in front of the artery in this region. We found it in the present case lying on the outside of an artery, the compression of which did not arrest pulsation in the radial artery, nor in the swelling. We had to do with premature bifurcation of the brachial artery. This anomaly, first pointed out by Meckel, is highly interesting to the surgeon. In such cases, one of the divisions always follows the usual course of the vessel behind the median nerve, and the other is superficial. It is not, perhaps, says Meckel, a premature division of the main vessel, but it is merely an instance of high separation of the ulnar artery. This supposition gains strength from the fact that the anomaly does not change in the least the origin of the inter-osseal vessels. In other instances, the radial artery is given off at a higher region than usual; but, in the present, we are convinced we had to deal with premature separation of the ulnar. Pressure of this superficial vessel did not cause pulsation to cease in the tumour. We, therefore, sought for the brachial artery. A ligature, however, was placed upon both. Why?—because these two arteries represent, in this anomalous case, the usual brachial artery, and in tying the two vessels, we only obtained the result of ligature of the brachial. Immediately after the operation the limb became pale, cold, and livid; three hours after, the extremity was red and warm. This opposite condition was due, as you will readily understand, at first to the sudden arrest, and afterwards to the re-establishment, of circulation. We had, however, in this case but little fear of gangrene; the prolonged pressure to which the extremity had at the beginning of the malady been submitted, had, to a certain extent, arrested the progress of circulation in the main vessels, and developed the capillaries so as to facilitate the formation of anastomotic communication. Twenty-four hours after ligature the heat of both hands and fore-arms was equal, and at present the little patient is doing perfectly well, and speedily advancing towards a complete cure.

[*] "Unquestionably Anel did, in one solitary instance, tie the humeral artery, immediately above an aneurism at the bend of the arm, and effected a cure without opening the swelling; but he did not think of applying the plan to the femoral artery, nor did he draw the attention of the French surgeons sufficiently to the matter, to make the latter imitate his operation: on the contrary, the method fell into oblivion, and was never practised."—*Dict. of Practical Surgery*, article Aneurism, by Sam. Cooper. French professors invariably forget this passage of S. Cooper's.—D. M'C.

LA CHARITE.

CANCEROUS SARCOCELE, DIARRHŒA: OPERATION AND CURE. BY PROFESSOR VELPEAU.

A patient, whose case is most interesting, in a practical point of view, was admitted into hospital on the 11th of March, 1846. He was affected with a tumour of the scrotum, of irregular shape and consistency. A puncture with the small trocar brought on hemorrhage in one spot of the swelling, and the evacuation of a serous fluid in another. An abscess and a gangrenous ulcer formed on the surface, and rendered it necessary to take a speedy determination. The patient was at the same time in a very debilitated condition, which increased daily from abundant and rebellious diarrhœa. Under the circumstances, M. Velpeau thought that the operation should be performed in spite of the diarrhœa. He remarked that diarrhœa is not always a contra-indication to amputation, and that, in the present case, provided no ulcerations were present in the intestine, the operation was the only chance left to the patient. Castration was performed, and, during the first days which followed it the state of the digestive organs did not appear to change, but after a short time the diarrhœa diminished, and disappeared altogether, and the wound healed without difficulty. Dissection of the tumour showed it to contain pure encephaloid matter in some parts; in others, scirrhous masses; and in others again colloid cancer. Perhaps—nay, probably—at a future day, a relapse may occur, but for the present the patient is cured, and his temporary release is due undoubtedly to the happy temerity of the surgeon, who did not allow himself to be deterred from the operation by the general weakness of the patient, or the presence of rebellious diarrhœa.

THE SPAS OF THE RHINE—MURIATIC ALCALINE SPAS; BY PROFESSOR TROUSSEAU AND DR. LASSÈGNE—(continued).

Wiesbaden.—Wiessbaden is in the Duchy of Nassau, and is one of the spas which attract most visitors. It presents three sources differing chiefly in the proportions of their component elements. The Kochbrunnen is the warmest of the three (70° cent.—158° Fah.) According to Kastner, its waters contain to one litre: chloride of sodium, one drachm and a-half; chloride of iron, ten grains; chloride of potassium, two grains; besides a very trifling quantity of free carbonic acid, and an inappreciable amount of hydrosulphuric acid. Wiessbaden is chiefly a bathing establishment, and its waters are covered with a sort of cream (der kahn), which makes them very unpleasant to drink. The two other founts (Schutzenhof and Alderquelle) are preferred at the beginning of the treatment. The baths last half an hour, and are taken at 32° cent. (90° Fah.), and generally produce, after a short time, a trifling eruption on the hands, but they almost always increase the pains of gouty subjects, at least, in a momentary manner. Not only are common baths and douches administered in Wiessbaden, but also "vapour baths," and it is not necessary to be a Berzelius or a Dumas to be aware that if vapour baths are useful in promoting a cure, it is not through the agency of the chloride of sodium they contain.

Kreutznach (*Prussia*).—Kreutznach has two sorts of waters of different composition: one kind springs from the soil, and is used in its natural state; the other called mutter laüge, or mother water. The source called Elise, exclusively used by the water-drinkers, contains in one litre: chloride of sodium, two drachms; chloride of calcium, one scruple and a-half; chloride of magnesium, eight grains; iodide and bromide of magnesium, an extremely small quantity. The analysis has been made by Lœwig, and repeated by Liebig, Mialhe, and Figuier. The temperature is 12·9 centigrade (54·5 Fahr.) The mutter laüge are more powerful; they are yellowish, of a disagreeable taste, and contain a large quantity of chloride of sodium—not less than six ounces (157 grammes to a litre) also bromide of calcium, one ounce; of sodium, half an ounce, and chloride of magnesium, one drachm. This analysis has been made by Osann, who is inclined to exaggerate the quantity of bromides. Dr. Engelmann has found in the same quantity of water only two drachms of bromides. Taken internally the mutter laüge is a violent drastic; even mixed with plain water it is a strong purgative. It is used in baths, lotions, gargles, and injections. The baths produce on the skin an energetic revulsion, which in many cases becomes critical. They replace, to a certain extent the sea-baths, and the patients are made to sit in the factories, where they receive for many hours imperceptible showers of salt water, which are preferable to the baths for delicate children.

Nauheim (Hesse).—The proportion of chloride of sodium varies from 59 to 260 grains to 7680 grains of water. It contains also twenty grains of chloride of calcium and of carbonate of lime. The waters are used in drinks and in baths; the reputation of the gaseous injections against sterility and impotency attracts numerous patients to the baths of Nauheim; and certain it is that if the stimulation does not positively forward the result, at any rate it increases the desire for sexual intercourse.

HOSPITAL NECKER.

NECROSIS OF THE LOWER JAW IN A WORKMAN ENGAGED IN THE FABRICATION OF LUCIFER MATCHES, BY DR. RICHET.

Basser, aged thirty-eight, during three years employed in a factory of lucifer matches, was admitted into hospital on the 7th of February, 1846, for a tumour in the left parotidian region. The man was occupied in the manufactory in preparing the phosphoric paste with which the extremity of the lucifer match is loaded. The parotidian swelling appeared to be owing to decayed teeth, and was attended with very trifling pain. On the 25th of February, although the swelling had previously appeared to subside under the application of leeches and poultices, fluctuation was distinct. A puncture was performed, and denudation of the inferior maxillary bone was recognised to exist. Erysipelas set in on the following day, and was not mastered until the 20th of March, when the swelling appeared to extend from the ramus of the maxillary bone to its body. Swelling of the super-hyoidian region became daily more evident, and also diminution of the diameter of the mouth; no redness or heat could be detected, although mastication was becoming more and more impeded by the swelling. The teeth loosened in the progress of disease were extracted by the patient himself, and in the course of the month of April the right ramus of the maxilla became affected, but slowly, and without pain or redness, tumefaction and induration being the only symptoms of disease present. On the 5th of May the patient had lost all his teeth except the four last molars of the right side. The alveolar edge of the maxilla was denuded and blackened by its prolonged contact with pus. Several fistular abscesses communicating with the mouth had opened all around the rami of the jaw, and pus was swallowed with the salivary secretions. On May the 16th the superior maxillary became also diseased in several parts, although the teeth remained solidly attached to it. Induration was gradually forming around the bone, but a purulent secretion became established in the left meatus auditorius; pain appeared in the corresponding side of the head, and, without paralysis, the patient became comatose, and expired on the 8th of June.

Post-Mortem Examination.—With the exception of the portion of the inferior maxilla, to which the muscle is attached, the entire bone was in a necrosed condition. The last four molars on the left side were all removed without effort. On the surface of the dead bone, particularly in the nighbourhood of the left ramus, periosteal secretions were found. The surrounding soft parts were in a cartilaginous state, and here and there true bony matter was met with, destined to replace the portion of the maxilla destroyed by disease. The left temporo maxillary joint was filled with pus, a portion of which had evidently oozed through the Glasserian fissure, the cavity of the tympanum being in full suppuration. On opening the head, the dura mater in the left temporal fossa was black, and easily detached from the bone. The *left cerebral lobe was changed*

into a soft brownish substance, evidently produced by hemorrhage in suppurating cerebral matter. No anatomical alteration was detected in the chest or abdomen.

DAN. M'CARTHY, D.M.P.

Italy.

PREPARATION OF THE VALERIANATE OF IRON, BY M. RUSPINI.—In the *Memoriale della Medicina Contemporanea*, M. Ruspini gives the following prescription for the preparation of the valerianate of iron:—Put four grammes of iron filings into a small porcelain mortar, and pour on them by degrees an equal quantity of valerianic acid, at the same time continually stirring. In about a quarter of an hour the mixture presents the tenacity of glue. On the addition of the first drops of the acid a powerful odour[1] of acetic acid is given off, which becomes still stronger in proportion as a greater quantity of acid is added. At the expiration of an hour, during which time it is necessary to continue stirring, the product acquires a dull red colour. Distilled water must then be added to the mixture, in order better to incorporate the solid matter which adheres to the sides of the vessel. The mixture must then be put into a proper vessel, heated, and filtered soon after. The filtered fluid, which contains the valerianate of the protoxide of iron, passes clear, slightly acid, and of a styptic, but by no means disagreeable, taste. On cooling, whilst exposed to the air, it becomes covered by degrees with a crystalline layer of a red colour. This is the first portion of the valerianate of peroxide of iron, which begins to separate itself from the fluid, being produced by the too active oxidation of the salt of iron. The fluid must be a second time filtered to separate this. The liquid remaining becomes again covered with a pellicle, which must be again removed, and so on. To hasten the process the liquid may be concentrated by heat. The valerianate of iron obtained by this mode possesses a reddish colour. It is partly in powder, and partly in the form of brilliant scales; it has a styptic taste, and a scarcely sensible smell of valerianic acid, and is insoluble in water. A few grains treated with a drop of concentrated sulphuric acid, give out the strong and characteristic odour of valerianic acid.

ON THE USE OF THE BARK AND LEAVES OF THE OLIVE-TREE.—M. Spinelli administers the bark and leaves of the olive-tree in the following forms: extract, tincture, decoction, syrup, and powder. The extract of the bark is intensely bitter, and that prepared from the leaves possesses a very agreeable aroma. M. Spinelli has found preparations from the olive-tree of much use in atonic affections of the *primæ viæ*, and of the mucous membranes in general, and in chronic diarrhœa, and dysentery. When combined with preparations of iron, M. Spinelli has administered it with advantage in leucorrhœa and chlorosis.

England.

The following are the only articles of interest to the profession in the last two numbers of the Lancet:—

SUPPURATION IN THE EYE-BALLS.—Mr. Ormerod reports from St. Bartholomew's Hospital the case of a woman, aged thirty-eight, who died of phlebitis nearly a month after delivery of her fourth child. From the date of her confinement, she suffered repeatedly from rigors, for which an antiphlogistic regimen was pursued. An abscess formed in the right ham. About a week before her death, it was noticed that the inferior part of the anterior chamber of the left eye was occupied by a grey deposit, while a smaller one of the same kind existed in the right. The left iris was dull; the eye in pain, and sightless; the pupil contracted and irregular. The day after she had lost the sight of both eyes; the left eye was less firm on pressure than the right; and the left knee-joint was swollen. On examination of the body, sixty-six hours after death, in addition to the usual changes consequent on secondary inflammation, the anterior chamber of the left eye was full of a puriform, opaque fluid; the lens was healthy, and appeared beautifully transparent in front of the mass of stringy pus which occupied the situation of the vitreous humour; the choroid coat and ciliary processes were covered with a closely adherent layer of an opaque creamy substance. There were no evidences of change in the veins of the orbit, which contained only blood.

EXTRAVASATION OF URINE.—Dr. J. Burford Carlill reports four cases of extravasation of urine, from University College Hospital, the most remarkable of which, from its sudden and extraordinary termination, has been already laid before our readers, at page , vol. 12. The other cases present nothing uncommon.

ECTROPIUM AFTER A BURN.—The case of an epileptic woman, aged twenty-seven, who, during a paroxysm, fell on the fire, and burnt the side of the face and neck severely, is reported from the Royal Free Hospital. Three months after the accident, the wounds had almost healed, and a large cicatrix resulted, which had gradually everted and so firmly drawn down the edge of the lower eyelid, that it could not in the slightest degree be restored by means of pressure. Granular inflammation of the conjunctiva followed, and threatened loss of vision. The malposition of the lid was maintained partly by slight adhesions of the skin to the malar bone, partly by the dermal contraction, and partly by two tense and prominent bands, which arose from the skin covering the lower jaw, tended downwards over the neck and shoulder, and terminated by subdivisions which lost themselves in the skin covering the scapula and clavicle. From the condition of the parts, it was obvious that some operation was required which should set free the lid by separating the adhesions of the skin to the malar bone, and, if possible, should give increase of surface to the skin of the cheek and corresponding side of the neck. A semilunar incision was accordingly made through the skin, commencing about an inch external to the temporal angle of the orbit, and carried round to a point about half an inch below the inner angle, the lowest portion of the curve being just below the inferior edge of the malar bone. This flap of skin was carefully dissected from the subjacent textures to within a very short distance of the tarsal cartilage, when the eyelid was readily restored to its natural position. A horizontal fold of conjunctiva was then removed, the lid secured by adhesive plaster in its right situation, and the cut edge of the flap stitched to the tissue immediately below the orbit, leaving a wide gap to be filled up by new material. The conjunctival affection was treated by a ten-grain solution of nitrate of silver, and began to disappear; but a stop was put to its cure by the *partial* return of the ectropium, which accrued upon the cicatrisation of the new sore. Considerable dragging still remained in consequence of the contraction of the neck. A semilunar incision was therefore made through the skin, commencing about an inch and a half behind the angle of the jaw-bone, descending to about midway between the clavicle and the jaw, and terminating just below, and about midway between the symphysis and angle of that bone. This flap was readily dissected up, and the tense band at the same time completely cut away. The patient's head was drawn towards the opposite shoulder, and confined by bandages in that posture; the lower edge of the flap of skin was retained by a suture at least two inches above its former site, thus leaving a large gap to be filled up, as in the former operation, by new granulations; the parts were covered with water dressing, and the patient was put to bed. This flap was partly composed of sound skin, and partly of cicatrix, and the latter sloughed. After some time, however, the wound healed, and the eyelid, which, immediately upon the completion of the operation, had resumed its natural position, became again semi-everted. This partial ectropium did not, however, remain beyond a few days, after which the lid began to restore itself; and after the lapse of a month from the last operation, its position and mobility were as perfect as before the accident, and the patient was discharged.

ABSCESS OF THE HEART.—Mr. Howitt relates a case of abscess in the heart, which he had an opportunity of seeing in the Lancaster Infirmary. The patient, a boy, aged eight, had suffered for about twelve hours from acute pain, which had come on suddenly, in the centre of the calf of the right leg. There was neither swelling or redness, nor any spasmodic action of the muscles to account for it. Occasionally the pain remitted in severity; and examination did not appear to cause any increase. He had no headache; no pain in the chest or abdomen; no thirst; pulse 110. Leeches were applied over the seat of pain, and calomel and opium, in small doses, were administered every four hours. No relief was produced, and the case went on for six days, becoming gradually worse, when the patient by degrees sank and died. At the post mortem examination nothing abnormal could be found in any of the tissues of the leg, although they were all carefully examined. On opening the chest, however, the pericardium appeared much distended, and on cutting into it there gushed out a pint of grumous fluid and pus, containing a number of curdy flakes, the whole interior surface being lined with a layer of cheesy scrofulous-looking matter, apparently soft, coagulated lymph, one-sixteenth of an inch in thickness. The pericardium investing the heart was covered with the same matter, and to the same degree of thickness. On [illegible] external surface of the heart more particul[illegible] rounded eminence was discovered, situated just at the junction of the right auricle with the right ventricle, and which was darker in colour than any other portion. Upon making a crucial incision into this prominence, there flowed out about a teaspoonful of ill-conditioned pus, with a few curdy flakes. This small abscess communicated, internally, by a small, ragged opening, with the right auricle, which contained a mixture of pus and blood; there was no communication with the sac of the pericardium; the lungs were perfectly sound. *₄* This case presents considerable resemblance to that recorded by Mr. Chance in the *Medical Times*, vol. xii, page 328.

LUPUS.—Mr. Gibb, one of the pupils of the Newcastle Infirmary, reports a case of [illegible] occurring in a man, aged twenty-six, of a [illegible] appearance, but healthy family. The [illegible] covered the greater part of the left cheek, upper l[illegible] and nose, extending slightly to the right cheek. The ulcer was below the level of the surrounding skin, and had a dark unhealthy even surface. The discharge was fœtid and sanious, but the patient did not complain of pain. The disease first appeared as a small pustule, in 1839. Various kinds of treatment were employed, with little or no benefit, including mercurials, arsenic, iodine, and the whole range of tonics and alteratives. In August, 1845, ointment, containing naphtha, was ordered to the sore, with the internal use of cod's-liver oil, under which treatment it gradually cicatrised; the tip of the nose was, however, destroyed, and a very slight ulceration in the inside of the left nostril continued up to April, 1846.

STRANGULATED INGUINAL HERNIA, WITH ULCERATION (?) OF THE INTESTINE.—RECOVERY.—Mr. Brown relates the case of a man who was brought to the Bath United Hospital, with a stran[illegible] inguinal hernia. The integuments over the tumour were much swollen and inflamed, and the abdomen was very tender. He vomited frequently. The hernia was an old one, and the strangulation had been caused by wearing a truss with the rupture unreduced. [The period during which the hernia had been strangulated is not given.] The warm bath and taxis having failed, Mr. Brown proceeded immediately to operate: on laying open the hernial sac, serum mixed with fæcal matter escaped, and a piece of potato, as large as the last phalanx of the thumb, was found lying on the intestine. The sac contained, "besides a large fold of intestine" (fold of large intestine?), a portion of ileum, highly injected and very dark. Two holes were found in the bowel, "one large, everted, and pouting, the mucous membrane appearing like a pair of small puckered protruding lips;" the other exceedingly small; the latter Mr. Brown was inclined to attribute to a touch from the knife. Mr. Brown now surrounded the wounds with the "pudding-bag" suture, and returned the intestine into the cavity of the abdomen. The patient did well, and was able to leave the hospital within a month.

[1] This odour is not given off when the valerianic acid is made to act on hydrated oxide of iron. This is a fact worthy of attention.

ORIGINAL LECTURES.

Lectures on some of the more Important Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross.

BY G. J. GUTHRIE, F.R.S., &c.

LECTURE VIII.

General Conclusions; The operations for placing a ligature on the aorta, the common trunk of the iliac, and on the internal and external iliac arteries; The operations for placing a ligature on the gluteal and sciatic arteries; The operations on the femoral artery.

The very great inconvenience these lectures have given me at this season of the year, causes me to defer the remaining four until the autumn, when I will make the four, eight, with the hope you may reap some advantage from the additional number. By the rules of this hospital the surgeons must all be, or have been, teachers or demonstrators of anatomy, or surgeons or assistant-surgeons of hospitals devoted to cases of general surgery. The ground on which it is built, is held on the condition that lectures on general as well as on ophthalmic surgery, shall be given to the medical officers of the public service from time to time, and that the hospital shall always be open to their attendance on the recommendation of the heads of these respective departments. It is the duty of the surgeon to give notice when he intends to begin their lectures, and you may rely upon its being given as a part of that duty. I am obliged by the attention you have paid, and shall be glad hereafter to see as many as may please to attend. You are all aware, however, that it is indifferent to me whether there are three, thirty, or 300, as I am not lecturing for money, and I never disallowed the attendance of any one, when I did do so.

I have brought together certain precepts, with which I shall conclude these lectures; I had intended to have gone through the principal operations with you, but there is not sufficient convenience here at this hot season, and I really have not the time to spare. I shall give the description of them to the reporter, who will publish them if he sees fit.

GENERAL CONCLUSIONS.

1. The Hunterian operation for the cure of an aneurism is not applicable to the treatment of a wounded artery, inasmuch as the wound of the artery communicates with the external parts, and nothing intervenes to prevent blood flowing from the wound in its side, or from its cut extremities.

2. When a large artery is divided and bleeds, the wound should be enlarged if necessary, and a ligature placed on both the divided ends; but if the artery be only injured and not quite divided, the ligatures should be applied one immediately above, the other below the injured part. The artery may or may not be then cut across, at the pleasure of the operator, but the limb or part should be placed in a relaxed position. A bandage should not be applied, and the edges of the wound should be simply brought together by adhesive plasters, which do not extend completely round the limb.

3. No operation is to be performed on any artery unless it bleeds at the moment of its performance, inasmuch as hemorrhage once suppressed may never return.

4. The intervention of muscular fibres, or of whole muscles, is not a sufficient reason for tying the artery at a distant part. They must be divided, if it be possible, to the extent required for a due exposure of the injured artery and its accompanying veins and nerves.

5. If the wound pass indirectly to the principal artery, from the back of the thigh for instance to the femoral artery in front, or from the outside of the arm to the humeral artery on the inside, the surgeon may (on satisfying himself of the part likely to be injured, by the introduction of a probe) cut down on the vessel opposite that supposed to be wounded, by the most simple and approved method. When the artery is exposed, the probe will point out the part at which the vessel has in all probability been wounded. Pressure made below this spot on the artery, will cause it to be distended and to bleed, if the flow of blood be not prevented from above; the artery is then to be secured by two ligatures, and the lower one should if possible be applied first.

6. The tourniquet should never be applied in an operation for aneurism or for a wounded artery. Compression by the hand in the course of the wounded vessel is allowable.

7. The blood from the upper end of a divided artery, or that nearer the heart, is of a scarlet arterial colour.

10. The blood from the lower end of a divided artery, or that which is further from the heart, is of a dark or venous colour, when it happens to flow immediately after the division of the vessel. At a subsequent period it may assume more of the colour of arterial blood, but it rarely does so for several days after the receipt of the injury, and always flows, or at least until a very late period, in a continued stream.

11. This regurgitation or flow of blood from the lower end of a divided artery is a favourable sign, inasmuch as it shows that the collateral circulation will probably be sufficient to maintain the life of the extremity.

12. The collateral circulation is in almost every instance capable of maintaining the life of the upper extremity when the axillary artery is divided, and the colour of the blood which flows from the end of the artery, on its being divided, is not always as dark as in the lower extremity, and it sooner resumes its arterial colour.

13. The collateral circulation is not always capable of maintaining the life of the limb when the femoral artery is injured. The best assistance which art can give is to rub the foot and leg in the gentlest manner, between the hands of one or two strong young women, for several hours, or even for the first three or four days; relaxing this process very little, even during sleep. When the vein is divided at the same time, or rendered impervious, the limb usually mortifies.

14. The collateral circulation is sufficient to maintain the life of an extremity in almost every case in which an aneurism has existed for eight or ten weeks, although it may be incapable of doing this if the principal artery have been suddenly divided, without any previous disease having existed in the part.

15. The theory and the operation for aneurism are never to be applied to the treatment of a wounded artery, which has caused a diffused or circumscribed aneurism, *whilst the external wound communicates with the artery*, unless it be impossible or impracticable to tie the bleeding vessel.

16. When an artery has been wounded, and the external opening has healed for weeks or months, so as to give rise to a diffused or circumscribed aneurism, it may be treated according to the theory of aneurism occurring from an internal cause, if the case will permit it without danger, although with this difference, that as the artery is sound the operation may be performed close to the tumour. If any doubt exist as to the capability of the collateral circulation to support the life of the lower extremity, when the external iliac is secured by ligature, the operation should be performed at the injured part by opening the swelling and enlarging the wound, as in the case of a wounded artery.

17. When a circumscribed or diffused aneurism which has formed after a wound has been opened, whether by accident or design, it is placed in the situation of a wounded artery, and should be treated as such. If the aneurism has arisen from disease of the vessel, and the wound or opening into it cannot be permanently closed, the limb is in a worse state than if the artery had been wounded by accident; because a ligature or ligatures placed on a diseased artery are little likely to be successful. They are liable to all the difficulties and inconveniences attendant on the old operation for aneurism. If a case of the kind should occur in a popliteal or femoral aneurism, situated at or below where the artery passes between the triceps and the bone, amputation, if it can be done low down, will be the best remedy. If the aneurism should have formed higher up, and the opening can be closed with any prospect of its healing, a ligature may be placed upon the artery above it; but on the recurrence of hemorrhage which cannot be restrained by moderate pressure, the artery must be tied below, or recourse had to amputation. It is, however, to be observed, that amputation under these circumstances, when resorted to as a third operation, rarely succeeds.

18. When an artery is wounded with a simple fracture of a bone, or with a comminuted fracture of smaller bones, with an external communicating opening, both ends of the artery should be secured, and the limb treated in the usual manner.

19. When the bone broken is the femur, and the artery divided is the femoral artery, the operation of amputation will generally be advisable. It will always be so if the fracture is a comminuted one, or the shaft of the bone is extensively split.

20. When the broken bone injures the artery and gives rise to an aneurism, the treatment is to be first of the fracture and then of the aneurism, as soon as circumstances render it advisable or necessary to have recourse to the operation for aneurism, and which can only be after time has been given for the collateral branches to enlarge, so as to maintain the life of the limb.

19. When mortification takes place in addition to, or as a consequence of a wounded artery, amputation should be had recourse to forthwith.

20. The place of operation should be in almost all cases at the seat of the original wound; but there may be an exception, viz.,

21. When the injury has been a mere cut, just sufficient to divide the artery and vein immediately below Poupart's ligament, and mortification of the foot supervenes, amputation should be performed below the knee, or at the part where the mortification more usually stops for a time.

This rule is founded on the observation, that great efforts are made by nature to arrest mortification a little below the knee. Sometimes they succeed; when they fail, death is almost inevitable. The advice to amputate at this part is founded on the fact of its being infinitely less dangerous, when done there, than on the thigh, independently of saving a joint.

22. When mortification has *continued for several days*, and is spreading without having once stopped, the constitution of the patient being implicated as marked by fever, amputation should not be performed until the mortification has been arrested and the line of separation has been well formed. In many cases, where there is great weakness or of irritability of constitution, it will be advisable to defer the operation to a later period, particularly if there be hope of the patient's becoming stronger and more tranquil.

23. If the mortification has once stopped and then begins again to spread, it will never again cease to extend, and amputation may give some chance of life.

24. Amputation of the arm should never be had recourse to, in consequence of a wound of the axillary artery, unless mortification takes place.

25. When mortification takes place after the operation for aneurism, the surgeon must be guided by the state of the patient's constitution, in resorting to or refraining from amputation.

26. When hemorrhage takes place from the surface of a stump, the artery should be tied at the part from which the blood comes in the first instance, if it can be easily done. If this should not suffice, the artery must be tied higher up, just at such distance as will afford a fair hope of its not having been affected by the derangement of the stump, which has led to the failure of consolidation in the extremity of the artery, and yet not too high to admit of the junction of any large collateral branches. If the bleeding proceeds from several small vessels, and cannot be arrested, the principal trunk should be tied above the diseased part, and the patient removed to a purer atmosphere, without which the operation rarely succeeds in any case.

27. When an aneurismal tumor mortifies, it is unnecessary and improper to tie the artery above the tumor, because it will be obliterated if the mortification be arrested by the efforts of nature, which the operation may interfere with, and even prevent, whilst, if the mortification spreads, it will be a matter of supererogation, and only hasten the patient's dissolution. When an aneurism inflames, is opened by ulceration, and bleeds profusely

it is a proper case for amputation, if such an operation can be performed.

On the Operations of placing a ligature on the Aorta, on the Common Trunk of the Iliac, and on the Internal and External Iliac Arteries.

In performing either of the three operations, it is advisable to compute the point at which the artery is to be tied, with relation to the umbilicus and the anterior superior spinous process and the crest of the ilium. The aorta bifurcates usually on the body of the fourth, or on the intervertebral substance between it and the fifth vertebra, although it may be higher or lower, which cannot be ascertained previously to the operation; the most usual place being nearly opposite to the margin of the umbilicus on the left side. It is about half an inch above this that the ligature should be placed on the aorta, if this operation is ever done again, rather lower than higher, on account of the origin of the inferior mesenteric artery. As this artery is to be reached by carrying the finger along the common iliac, the comparative situation of that vessel is next to be estimated.

The aorta divides into the two common iliac arteries, the length of which varies according to the stature of the patient, and the place at which the aorta bifurcates. The common iliacs again divide into the external and internal iliacs, which division is usually opposite to the sacro-iliac symphysis. The length of the common iliac artery is therefore tolerably well defined, as scarcely ever exceeding two inches and three quarters, and seldom being shorter than two inches. The external iliac is a little longer than the common iliac, and the place of subdivision of the common iliac into external and internal can always be ascertained during an operation, by tracing the external iliac upwards to its junction with the internal iliac to form the common trunk, which proceeds upwards and inwards to the aorta. The left margin of the umbilicus being taken as a point opposite to that which may be presumed to be the part at which the aorta divides, and the situation of the external iliac becoming femoral being clearly ascertained, a line drawn between the two will nearly indicate the course of these vessels; sufficiently so at all events to enable the operator to mark with his eye the place where he expects to tie the artery, and to regulate the length of the incision, so that this ideal spot may correspond to its centre. It is necessary to recollect also, that the whole of one hand and part of the other must be introduced into the wound, to enable the operator to pass the ligature round the artery, and to tie the knots; so that an external incision of less extent than five inches will not suffice, and six will afford a facility in operating, which will save pain to the patient, and inconvenience to the operator. In calculating the length of the incision, allowance must be made for the size, obesity, and muscularity of the patient. If a rule be placed on the crest of each ilium, about one inch and a half behind the anterior superior spinous process, it will pass in a well-formed man across the junction of the fifth lumbar vertebra with the upper part of the sacrum, and a little way behind where the common iliac divides into external and internal. The centre of an incision, six inches in length, beginning about half an inch above Poupart's ligament, and about the same distance to the outside of the inner ring, and carried upwards, will fall nearly on a line with this point. The incision should be nearly parallel to the course of the epigastric artery, but a little more to the outside, in order to avoid it and the spermatic chord, and having a gradual inclination inwards towards the external edge of the rectus muscle, the patient being on his back, with the head and shoulders raised, and the legs bent on the trunk. The aponeurosis of the external oblique muscle having been opened inferiorly, is to be slit up for the whole length of the external incision; and the director having been first passed under the internal oblique muscle, through a small opening carefully made in to it, it is to be divided in a similar manner. The transversalis is then to be cut through at the under part, and its tendinous expansion divided at the upper part, the greatest precaution being taken by the finger to prevent the peritoneum from being injured. The fascia transversalis is then to be torn through at the lower and outer part, so that the fingers may be passed outwards towards the ilium, and the peritoneum detached from the iliac fossa, and turned with its contents inwards, by a gradual and sidelong movement of the fore and second finger inwards and upwards; until passing over the psoas muscle the external iliac artery is discovered by its pulsation. It is then to be traced upwards and inwards towards the spine, when the origin of it and the internal iliac from the common trunk will be felt. The point of the forefinger will then be nearly in the centre of a line drawn from the umbilicus to the anterior superior spine of the ilium; and hence the necessity for an incision of six inches in length, if the artery is to be tied high up, which is to be accomplished by tracing it in a similar manner to its origin from the aorta.

If the *internal iliac* is to be tied, the operator traces it downwards from its origin, in preference to passing his finger from the external iliac artery inwards in search of it. Having placed the point of his fore finger on the vessel at the part where he intends to pass his ligature, he scratches with the nail upon and on each side of it, so as to separate it from its cellular attachments, and from the vein which accompanies but lies behind it. Thus far the operator proceeds by feeling; but it is now necessary that the sides of the wound should be separated, and kept apart by blunt spatulæ curved at the ends, so as take up as little space as possible, and not injure the peritoneum. The surgeon should if possible see the artery, and the ligature carried on the eye of a bent probe, or a convenient aneurismal needle, should be passed under it from within outwards, when it should be taken hold of with the forceps; the probe or needle should then be withdrawn, and the ligature firmly tied twice, or with a double knot. Great care must be taken to avoid every thing but the artery. The peritoneum which covers it, and the ureter which crosses it, must be particulary kept in mind. The situation of the external iliac artery and vein, which have been crossed to reach it, must be always recollected, and if there be sufficient space they should be kept out of the way, and guarded by the finger of an assistant.

The *common trunk* of the iliac arteries and the aorta itself may be tied by the same method of proceeding; the only difference which can be practised with advantage will be to make the incision a little longer at its upper part; no inconvenience arising from the addition to the length of the external wound, whilst the subsequent steps of the operation are much facilitated by it. The following method of proceeding, adopted in cases 31 and 108, will bring the method of operating so graphically before the reader that it cannot be misunderstood, and may be readily followed in operating. I began the operation, the patient lying on the back, by an incision on the fore part of the abdomen, commencing an inch and a-half below the inside of the anterior spine of the ilium, and the same distance within it, carrying it upwards, and diagonally inwards towards the edge of the rectus muscle above the umbilicus, so that the incision was between six and seven inches long. If the incision is made more outwardly, towards the side in a straight or vertical line from the ilium towards the ribs, great difficulty will be experienced in turning over the peritoneum with its contents, so as to place the finger on the last lumbar vertebra, an inconvenience which will be avoided by making the incision diagonally and of the length directed.

After dividing the common integuments, the three layers of muscles were cut through in the most careful manner; the division of the transversalis muscle was attended with some difficulty, inasmuch as there was little fascia transversalis, and the peritoneum was remarkably thin—as thin as white silver paper. On attempting to reach the under part on the inside of the ilium, so as to turn the peritoneum over, which in sound parts is always done without the least difficulty, I found that it could not be done on account of the tumor which projected inwards adhering to it, and some bleeding took place from the large veins which surrounded it, giving rise to the caution not to proceed further in that direction. At this moment, in spite of the greatest possible care that could be taken by Mr. Keate, who raised and protected the peritoneum, a very small nick was made in it, sufficient to show the intestine through it. Perceiving that I could not tie the internal iliac as I had at first intended, and that I must place the ligature on the common iliac, I tried to gain a greater extent of space upwards; but where the tendon of the transversalis muscle passes directly across from the lower ribs to and forming the sheath of the rectus, the peritoneum is usually so thin and so closely attached to it that it can be separated with great difficulty. I knew this from the operation I performed in case No. 50, when, in spite of all the precaution I could then take, the peritoneum was at this spot slightly opened. It occurred in the present instance, and the right lobe of the liver was thus exposed.

The opening thus made on the fore part of the abdomen was not large enough to admit two hands. The peritoneum being however separated a little from the posterior wall of the abdomen from the outside, four fingers of one hand were introduced beneath it, and it was turned a little over towards the opposite side. In doing this it must be remembered that the peritoneum must be raised, the hand being pushed towards the back as little as possible, in order to avoid getting behind the fat commonly found in that part of the body, which would lead to the under edge of the psoas muscle instead of the upper surface, and thus render the operation embarrassing.

The peritoneum being carefully drawn over with its contents, I found I could only get one hand, or a little more underneath it in search of the artery, the tumors below preventing any further detachment of the peritoneum in that direction. I therefore passed my finger across the psoas muscle, and it rested on the fifth lumbar vertebra. The common iliac artery was not however to be felt even as high up as the fourth lumbar vertebra, nor the aorta; they had both risen with the peritoneum, and my finger resting on the spine was beneath them. Mr. Keate endeavoured to raise or draw over the peritoneum, to give me an opportunity of seeing the vessels, but this was out of the question. In doing this, he felt the pulsation of the iliac artery, which had been raised with the peritoneum, to which I found it adhering. Carefully separating it with the end of the fore finger of the right hand, I passed a single thread of strong dentists' silk, as it is termed, in a common solid aneurismal needle by the aid of the thumb and fore finger of the left hand, round the artery without seeing it. I could bring the artery a little forward by means of the aneurismal needle, when it appeared to be perfectly clear, and from the distance of the bifurcation of the aorta above, I calculated that the common iliac was tied exactly at its middle part. All pulsation below immediately ceased.

The two ends of the ligature were twisted, the peritoneum replaced in its proper situation, care being taken that the two small openings into it should be well covered under the skin, so that they might not be in the line of the incision, and that they should be covered by partly divided healthy parts, which might thus adhere to each other. Three strong sutures and three or four smaller ones were put in first through the skin, in order to prevent the parts bursting asunder from the movements of the patient. This operation was only formidable from the circumstance that space could not be obtained for the introduction of both hands, for, strange as it may appear, the safety of, and ease in doing, the operation depends on the first incision in the fore part of the abdomen being so large that the peritoneum containing the bowels may be freely drawn over by the expanded hands or the assistant, so that the operator can see what he is doing beneath. In case No. 107, the whole of the parts under the peritoneum could be seen distinctly, and several gentlemen not in the profession who were present, saw the common iliac artery in its natural situation. The aorta may be as readily tied by this mode of proceeding as the common iliac, and I am satisfied it is in this way such an operation ought to be performed, provided it becomes necessary to attempt it, which I suspect it will not be, for when an aneurism has been formed so high up that it prevents the application of a ligature on the side on which the disease is situated, the common iliac will be more readily tied above it, instead of the aorta, by

performing the operation on the opposite or sound side of the body, for as a ligature can be applied with great ease on the sound side on the middle of the common iliac artery, it requires very little more knowledge and dexterity to pass over to the opposite or diseased side, and tie the artery above the aneurismal tumor, the size of which would have prevented the operation being done on its inner or affected side. The placing a ligature on the aorta for an aneurism in the pelvis will thus be be rendered unnecessary; this is the most important result to be deduced from the operation described.

The patient suffered little or nothing from the operation, which was performed on Saturday; there was no augmentation of the pulse until Sunday evening, when it rose to 120; she then experienced some pain, which was materially diminished, although not altogether removed, by the abstraction of fourteen ounces of blood. At four o'clock in the morning, Mr. Hancock, now surgeon to the Charing-cross Hospital, took away fourteen ounces more, after which she had not a bad symtpom. The bowels were not moved for the first four days. The temperature of the limb diminished, but not much, which may be attributed to a method adopted in case No. 108. For the first time two persons constantly rubbed the limb night and day, and a hot brick, in baths of hot water, covered by flannel were applied to the feet, of the temperature of from 120° to 140°. One nurse rubbed the lower part of the limb, another the upper for three days and nights; if an interval of a few minutes elapsed a hot flannel was put on the limb. The friction was very slight, so as not to injure the cuticle. The patient occasionally dozed a little, but the same gentle friction was kept up. The ligature came away on the twenty-sixth day after the operation. The external incision healed very readily, but was followed by a herniary projection, requiring the support of an abdominal bandage.

The situation of the ureter and rectum on the left side in this operation, and of the ureter and the cæcum with its appendix on the right side, should be well understood, and it should be known that the ureter rises with the peritoneum. The relative situation of the common iliac artery and vein should be particularly attended to in passing the ligature around the vessel. On the left side the artery lies external and anterior to its commencement; on the right, the artery passes over the commencement of the vena cava and the left iliac vein, which do not follow the peritoneum when drawn towards the opposite side. The bowels should be thoroughly well evacuated before the operation is performed, but purgatives should not be given for some days after it has been done. The food should be liquid, and inflammation should be subdued by leeches, general bleeding, fomentations, and opium.

The *external iliac* artery has been so often and so successfully tied that a description of the two methods of proceeding commonly adopted will suffice. The first, recommended by Mr. Abernethy, is in accordance with the operations on the common and on the internal iliac. The patient being laid on his back, with the shoulders slightly raised, and the legs bent on the trunk, an incision is to be made about three inches and a-half in length in the direction of the artery, and terminating over or a little above Poupart's ligament. The aponeurosis of the external oblique muscle will be exposed, and an opening being made into it, a director is to be introduced, and it is to be slit up to the extent of the external incision. The internal oblique and transversalis muscles, are then to be "nicked," so as to allow a director or the point of the finger to be introduced below them, when they also are to be divided, the finger separating them from the fascia transversalis and peritoneum. The fascia transversalis running from Poupart's ligament to the peritoneum is now to be torn through with the nail, immediately over the pulsating artery, and the peritoneum is to be separated by the finger and pushed upwards until sufficient room is obtained; which, in this as well as in all other operations on the iliac arteries, is sometimes difficult on account of the protrusion of the intestines covered by the peritoneum, when the patient is not sufficiently tranquil. The artery is yet at some depth, and covered by a dense cellular membrane, connecting it to the vein on its inside, and which must be torn through with the nail. The anterior crural nerve is separated from the artery by the psoas muscle, at the outer edge of which it lies. The aneurismal needle should be passed between the vein and the artery, and the point made to appear on the outside of the artery.

In this operation the ligature is placed on the external iliac, above where it gives off the epigastric and circumflexa illi arteries; and as the operation is very much the same as that already described, with the exception of the incision being shorter and nearer to Poupart's ligament; it is obvious if it were found necessary from disease to tie the artery higher up, or even to tie the common iliac, that it might be done by merely enlarging the wound.

Another method has been recommended by Sir Astley Cooper, which is perhaps more followed where there is little doubt of the artery being sound. It offers the advantage of greater space, which enables the surgeon to see better what he is doing; but it does not so readily admit of the artery being tied high up, without the incision being extended upwards, so as to give more room for the introduction of the hand behind the peritoneum.

"The patient being placed in the recumbent posture, on a table of convenient height, the incision is to be begun within an inch of the anterior superior spinous process of the ilium, and is to be extended downwards in a semicircular direction to the upper edge of Poupart's ligament. This incision exposes the tendon of the external oblique muscle: in the same direction the above tendon is to be cut through, and the lower edges of the internal oblique and transversalis abdominis muscles are exposed; the centre of these muscles is then to be raised from Poupart's ligament; the opening by which the spermatic cord quits the abdomen is thus exposed, and the finger passed through this space is directly applied upon the iliac artery, above the origin of the epigastric and circumflexa illi arteries. The iliac artery is placed upon the outer side of the vein; and the next step in the operation consists in gently separating the vein from the artery by the extremity of a director, or by the end of the finger. The solid curved aneurismal needle is then passed under the artery, and between it and the vein from without inwards, carrying a ligature, which being brought out at the wound, the needle is withdrawn, and the ligature is then tied around the artery, as in the operation for popliteal aneurism. One end of the ligature being cut away, the other is suspended from the wound, the edges of which are brought together by adhesive plaster, and the wound is treated as any other containing a ligature."

This method of operating will suffice when the artery is to be tied for an aneurism which does not extend as high as Poupart's ligament. When it does, the operator will be so much inconvenienced by it, whilst the sound part of the artery above the tumor will be so much in a hollow behind it in the pelvis, that a ligature will not readily be passed around it, and the disturbance to the peritoneum will be much greater, and much more likely to give rise to peritonitis, than if the incision were made an inch longer on the face of the abdomen. The surgeon, instead of searching for the artery, as Sir Astley Cooper has directed, through the passage by which the spermatic cord quits the abdomen, and thus passing the fingers directly under the peritoneum, will find it very much for his own ease, and for the advantage of his patient, to pass his fingers under the peritoneum from the inside of the wall of the ilium, from which it readily separates, and thus approach the artery from the outside, instead of from below. He will gain more room, reach the artery easily above the origin of the circumflexa illi, and avoid that disturbance of the peritoneum, in applying the ligature, which often leads to inflammation.

If the surgeon has unluckily divided the epigastric artery, either in this or any other operation, all that he has to do is to enlarge the incision, and tie both the divided ends; and I have no hesitation in saying, it will not be of any consequence, either in this operation or in one for hernia.

Of the Operation of placing a Ligature on the Gluteal and Sciatic Arteries.

In all cases of aneurism of the gluteal and sciatic arteries, the internal iliac artery should be tied, instead of an operation on the part itself. In all cases of wounds of arteries which are the only ones rendering an operation for placing a ligature on these vessels necessary, the wound should in a great measure regulate the course of the incision. The operation is an act of simple dissection, first, through the common integuments for the space of four inches, then through and between the fibres of the glutæus muscle to the same extent; a dense aponeurosis covering the vessels is to be next divided, when the bleeding will lead to the injured vessel. In the dissecting-room the operation is described as follows:—Place the body on the face, turn the toes inwards; commence the incision one inch below the posterior spinous process, and one inch from the sacrum, carry it on towards the great trochanter in an oblique direction to the extent of four inches, divide the gluteus muscle and the aponeurosis beneath it, and seek for the artery as it escapes through the upper and anterior part of the sciatic notch and lying close to the bone. If the vessels of the gluteus muscle bleed, so as to be troublesome, and cannot be stopped by compression, they must be secured.

If the sciatic artery be the vessel injured, the incision should be made in the same direction, but about an inch and a half lower down; if the course of the wound renders it doubtful which artery is wounded, the incision should be as nearly as possible between the two lines directed, the wound being always the best guide; and care should be taken in every instance to include nothing in the ligature but the artery.

On the Operations on the Femoral Artery.

Compression should never be made on an artery on which a ligature is about to be placed; because the pulsation is thereby suppressed, and the most important guide to the vessel is at the same time taken away. Where the artery is wounded and bleeding, compression must be had recourse to in the first instance to arrest it; and the first incisions must be made without the information which the pulsation gives as to the precise situation of the artery, although the finger may be allowed to rest on the part, underneath which the artery could be felt before the pressure was applied. The external incision should always be made longer or shorter in proportion to the depth at which the artery is situated. It should be at least one-third longer in the middle than at the upper part of the thigh; and whilst a long incision always facilitates the subsequent steps of the operation, it never does harm, unless it be out of all reasonable proportion. The centre of the incision should be if possible directly over that part of the artery on which it is intended to apply the ligature; but no inconvenience will arise from its being applied nearer its upper extremity. The patient being laid on his back, and properly supported, the knee is to be bent and turned outwards, by which the head of the femur will be rolled in the acetabulum, and the femoral artery will be more distinctly felt at the upper part lying on the psoas muscle, having the vein to the inside of it, and the anterior crural nerve about half an inch on its outside, passing between the psoas and iliacus muscles, although some branches soon approach the artery, and run down on the external part of the sheath. The relative position of the parts being duly considered, an incision is to be made directly in a line over the pulsating artery, and carried through the skin, cellular tissue, and superficial fascia, down to the deep-seated, or fascia lata of the thigh. If an absorbent gland should be in the way, it must be turned aside or removed. The arteria profunda femoris is given off about two inches below Poupart's ligament, on the back part and outside, whilst three or four small vessels spring from half an inch to an inch below it on the forepart, and one or other of these may be divided. They are the superficial epigastric, the superficial pudic, the superficial circumflex of the ilium, and probably an artery supplying the absorbent glands. If they bleed so as to be troublesome they must be secured, more particularly if the femoral artery is to be tied below them. The fascia lata is now to

be divided, with that part of the fascia transversalis, which descending beneath Poupart's ligament forms the sheath of the artery, when the vessel will be exposed. In dividing this fascia and sheath, the point of the knife is always to be directed to the centre of the artery, so that if it be cut by accident it may be seen, when the only result will be the necessity for the application of a ligature above, and one below it. The artery being fully exposed, as ascertained by the pulsation being felt by the finger, it is to be separated from its cellular attachment to the sheath on each side by a blunt or silver knife; and the aneurismal needle or probe, armed with a strong single thread of dentists' silk, is to be passed under it from the inner or pubic side outwards, by which all injury to the vein from the round point of the needle or probe will be avoided. Two common knots are to be made in the usual manner, when one thread may be cut off, or the two twisted together and brought carefully out of the wound; the edges of which are then to be duly approximated and retained in that situation by sticking plaster and a moderate compress, also secured in a similar manner. The knee is to be bent forward to relax the parts, and laid on the outside with a pillow underneath it.

The needle will pass more easily under the artery if the thigh is bent on the trunk; and before the knots are tied, the surgeon should ascertain that pressure on the part or artery which he has nearly surrounded by the ligature, suppresses the pulsation in the tumour below.

The operation for popliteal aneurism lower down in the thigh is to be done in the following manner:—

The surgeon having turned the knee outwards, and bent the leg inwards into the tailor's sitting position, to show the course of the sartorius muscle, should trace the artery from the groin downwards, until it appears to pass under that muscle. The external incision, four inches in length, made in the course of the artery, should pass over this point one inch, so that when the fascia lata is divided, the sartorius muscle may be seen crossing over to the inside at the lower extremity of the wound. The fascia lata is to be divided for the space of two inches of the incision upwards. The fore-finger is then to be introduced into the wound, and pressure made with it rather outwardly, when it will readily distinguish the pulsation of the artery, still included in its sheath. This is to be opened by slight and repeated touches of the knife directly over the centre of the line of the vessel, or it may be divided on the director, when the artery will be exposed. The point of the fore-finger will easily recognise it from the roundness and firmness of the feeling communicated by it as well as by its pulsation, and the end of the nail, or handle of the scalpel or blunt knife, will separate it with facility from its attachments, to such an extent as will admit the blunt point of the solid unyielding aneurism needle to be passed beneath it from the pubic side. If the point of the needle does not readily come through the cellular attachments of the artery on the outside, this part must be touched lightly with the scalpel, or rubbed with the nail until the ligature is exposed, which should then be taken hold of with the forceps, and one end drawn out, whilst the instrument with the other end is withdrawn. The operator, taking both ends of the ligature, which has been in this manner passed under the artery, between the fingers of one hand, presses upon the artery with the fore-finger of the other, so as to arrest the course of the blood in it, when if there be an aneurism below, the pulsation in it will cease. The ligature is then to be pressed upwards as far as the artery has been detached, and is to be tied with a double knot. The wound is to be dressed as in the previous case by adhesive plaster and compress, but without a bandage; and the patient is to be placed in bed, with his knee bent forward, or resting on the outside if more agreeable to him.

The operation is done in this manner on that part of the femoral artery which is not covered by muscle, and all interference with the sartorius is avoided. It is the improvement on the Hunterian operation recommended by Scarpa, and ought always to be adopted. This method obviates all discussion as to placing the ligature on the outside of the sartorius muscle, or as to the fear of injuring the absorbents; and as to the saphena vein, it can always be seen, and its course traced up the thigh and avoided. After the first incision is made and completed down to the fascia lata, that part is to be divided, I have said for the length of two inches, but this must be dependent on circumstances; the object being to obtain a view of the sheath containing the artery, the opening into which after the first touch of the knife may be completed with the assistance of the director underneath it; and the artery will be less disturbed in its lateral attachments by an opening into the sheath of three quarters or an inch in length, than by one of half the extent, as it will admit of the aneurism needle being passed under it with more facility, and consequently with less disturbance to the surrounding parts. I have never had reason to believe that a free opening into the fascia of the thigh has done mischief, or even into the sheath, provided the artery has not been unnecessarily disturbed.

The warmth of the limb operated upon should be maintained by gentle friction from the toes upwards to the knee, and when left at rest it should be enveloped in flannel. The wound should not be dressed until the fourth day, the limb being kept quite quiet; the patient should move as little as possible in bed, and the part of the heel on which it rests should be examined from time to time, as it may under pressure become gangrenous.

Suppression of the secretion of urine is not uncommon during the first twenty-four hours, and will be gradually removed by the patient's taking mild diluent drinks. The constitutional irritation in all these operations is frequently great, the pulse rising in forty-eight hours from eighty-five to one hundred and twenty; and if this continues until the third day, when the fear of mortification will have subsided, it should be moderated by the abstraction of a small quantity of blood. In cases of this kind I have had occasion to bleed twice, and with the happiest effect, the pulse having fallen in consequence to its natural standard. The medicines given at the same time were saline draughts every six hours, with four drops of Battley's solution of opium. The ligatures came away on and about the fifteenth day.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XIV.

ALOPECIA AND CALVITIES.

As proposed by Startin.

GENERA AND SPECIES.	DIVISIONS.	FORMS.
ALOPECIÆ.		
A. Simplex	Localis.	Circumscripta
Furfurosa contagiosa		Sparsa
Nitida		Diffusa
Calva vel senilis	Generalis.	Inveterata
Cicatricosa		

GENTLEMEN,—The anatomical structure and uses of the human hair having formed a subject for consideration in a former lecture, I must beg you will recal to your memory what I then advanced to demonstrate that the production of the hair from its bulb very much resembles that of the cuticle from the papillary layer of the dermis. This is seen not only in the constant growth and reproduction of these parts, but also in the diseases to which I now beg to direct your attention, consisting in the entire or partial loss of the hair, which may be compared to the desquamation of the cuticle.

These forms of disorder Willan considered to belong to the order porrigo, the subject of last week's lecture; but, as I then mentioned, it would appear that they cannot be properly classified with affections having pimples, pustules, crusts, discharges, and ulcerations for their characteristic signs; though baldness of a greater or less extent and curability, may, and often does, accompany porrigo, in common with other diseases affecting the scalp.

I therefore propose to follow the examples of such of my predecessors as have considered the loss of the hair to result from diseased action in the parts concerned in its production. Under the term alopecia I propose to subdivide the affection into five species, founded upon their pathognomonic signs, and thence termed A. simplex, A. furfurosa, A. nitida, A. calva or senilis, and A. cicatricosa; the divisions are localis and generalis; and the forms or varieties, circumscripta, sparsa, diffusa, and inveterata. This arrangement of the subject would at once point out the precise nature of the complaint, and distinguish alopecia from the baldness resulting from other causes, which requires a special treatment, according to the malady from which it originates. Alopecia may thus be defined to consist in a partial or complete fall of the hair, either from diseased action, or from atrophy in the bulbs, manifested often by a change in its colour or greyness, both on its disappearance and reproduction; the baldness either presenting an aspect not to be distinguished from the healthy state of the skin, or a polished or scurfy appearance, according to the variety of the disease. The microscope discovers considerable change in the structure of the grey hairs in this complaint, a greenish substance occupying their centres. It is also stated that, in some instances, cryptogamic vegetation may be detected, which has been called by M. Gruby, its discoverer, "microscoporon Audouini," in honour of Audouin, whose researches on parasitic plants destroying the living animal tissues, seem to deserve the distinction.

Alopecia, the porrigo decalvans of Willan, and the tinea tonsurans of some French authors, appears to be a contagious affection under certain circumstances, which as yet are involved in obscurity, though the seeds or sporules of the vegetation above referred to may be the probable cause.

The first species of diseased baldness, or alopecia simplex, consists in a faulty or absent secretion in the bulbs or organs concerned in producing the hair; and to this species the baldness requiring medical interference is most frequently to be referred. This kind of alopecia appears, for the most part, after violent constitutional derangements—as fevers, and long illnesses, which have confined the patients for a considerable time to one apartment, or to their beds. The cutaneous excitement called erythema, produced by mercury or by syphilis, is also a common cause of this species of baldness, which, I may observe, may be irregularly scattered all over the head, so that the hair becomes thinned, and finally may completely fall off, or it may occupy one circumscribed patch; in this instance it commonly arises in the partings of the hair from the irritation occasioned to the roots by constant pulling against them by brushes, combs, &c., or it may be manifested in several spots; thus constituting the varieties of the disease I have already described as sparsa, circumscripta, diffusa, guttata, &c. A. simplex may, however, occur without any constitutional derangement that can be traced; in which case it does not differ in any manner that admits of ocular detection from the foregoing description of the disease. The hair in these cases loses its ordinary lustre, and appears, what is vulgarly called, *dead*, and when examined under the microscope, as stated in the definition, often seems to have lost much of its colouring matter, and becomes grey, the central part containing a greenish substance instead of the ordinary cellular structure. I must confess that the description of M. Gruby of a cryptogamic vegetation fixing itself on the hairs, near the points of their exit from the epidermis, and ultimately extending itself into their sheath, and producing their fall, would be an admirable mode of accounting for this porrigo decalvans, as it has been called, and the contagion accompanying the first and following varieties; but much careful research on this point has hitherto failed to convince me that the appearance described is constant, or that it is not a change taking place in the dead hair, rather than a cause of its loss of vitality; but I shall resume this subject on a future occasion, when further observations shall have extended my knowledge; at any rate, I must disclaim the existence of such appearances in the simple alopecia just described, which is not a contagious disease,

the hairs being thinned in the situations occupied by the complaint, and when a bare place is found to exist, this thinning extends irregularly into the surrounding parts. Nor is the scalp usually covered by scurf (except in complications with pityriasis, psoriasis, &c.), or changed in appearance from its natural condition, which circumstances distinguish this variety from the next species, or that which I have named A. furfurosa, furfuraceous or scurfy baldness.

This complaint, commonly known as the ringworm, the tinea tonsurans of the French writers, affects for the most part more juvenile subjects than the foregoing, and is propagated by contagion. It seems, however, to be a similar affection of the hair-bulbs to the former; but the excitement is probably occasioned by the parasitic vegetation going on in the part, rather than by diseased actions, spontaneously originating in the capillary circulation; and it is observable that a greater degree of inflammation and redness attend this form of alopecia, which is visible when the disease attacks the forehead, face, neck, &c., of the parties affected—an occurrence that is observable in five out of ten cases. There is also a distinct boundary here, commonly of a circular figure between the diseased and healthy parts, though the spots occasionally coalesce and become confluent; and the hair, if examined near its root, seems in many instances rather to be torn or broken off than to have come out by the roots.

When examined by the microscope, these hairs appear from the apex of their roots to about a line above the point at which they emerge from the epidermis, to be covered with a soft mucous looking matter, wherefore it is in this variety of alopecia that I have seen something like the vegetation described by Dr. Gruby as constituting its contagious principles. This form of alopecia is the troublesome variety of ringworm, constituting such a pest in our large schools, and which, from its long continuance and obstinacy, is regarded by parents and schoolmasters with well deserved dread and repugnance, not so much, however, on account of the dangerous nature of the complaint, which is never important, as of its duration. This form of disease is certainly not described by Willan or the annotators on his writings, but is well defined in the work "Sur le Siège et la Nature des Teignes," by Mapon the younger, of Paris, under the designation of la Teigne Tondante (the shaving or barber ringworm). It attacks all ages, but is most commonly observed before the age of puberty, and in my experience much more frequently amongst boys than girls—a circumstance perchance arising from the custom of wearing the hair short in the former, and long or covered in the latter.

Another species of baldness closely allied to A. furfurosa, and which has often appeared to me to be contagious, I have called A. nitida, clean or polished baldness; it manifests itself in one or more points on the scalp or any part of the body covered by hair—first by its falling off, leaving a smooth and often white shining spot, frequently having an unctuous appearance, without scurf or desquamation of any kind, save in a few instances, which perhaps constitute the contagious examples, when there has appeared a slight powdery substance covering the bald places, with difficulty distinguished by the naked eye; this baldness often extends rapidly, so that the hair is completely lost, and more commonly attacks adults than very young subjects. I last week had the pleasure of showing you, a young woman, aged seventeen, who had lost not only all the hairs of her head, but that of her eyebrows and many parts of her body by this disease. There was no possibility of assigning a cause for it; the baldness had come on gradually through a period of two years; it commenced by one or two bare places on the scalp, which were washed with tobacco-water; that, it was stated, had the effect of producing headach, and apparently the rapid extension of the malady to the state in which you witnessed it, and in which it had continued for eighteen months. You may remember a slight down covered the parts, instead of hair, thus showing that complete atrophy of the piliferous bulbs did not exist—a circumstance you will often have occasion to remark in the complaint we are considering, as its absence would indicate that little or no reasonable hope existed for a recovery from the baldness. When the bald places I have described are attentively examined, the apertures which gave exit to the hairs seems closed with a substance darker than the other parts of the bare spot, but beyond a collection of cuticular desquamations, mixed with the dirt attracted by the usually unctuous state of the parts, I have been unable to discover any abnormal appearance by means of the microscopic power I have hitherto applied; like *A. furfurosa*, the hair surrounding the diseased patches of A. nitida manifests no change from its healthy state, but the spots themselves are generally whiter than the sound portion of the scalp; and it is remarkable that after the age of twenty-five, the hair growing on the diseased places commonly appears grey, the greyness arising from a fault in its structure or secretion, rather than from the peculiar absence of colouring matter which attends the greyness of age—a fact readily demonstrated by the microscope. This disease appeared to be the *porrigo decalvans* of Willan, and though by him considered a rare disease, is now so exceedingly common, that at this moment I could point to twenty cases of it, particularly amongst the youthful aspirants to fashion in affairs of the toilet, who resort constantly to the "hairdresser's-saloon," where it is probable the "*clean pair of brushes*" so constantly assured, and I fear rarely obtained, confer this boon on the reclining victim to the foible of letting another accomplish what might, in this instance, be more safely and as speedily done by himself. The next species of alopecia, designated on the chart calva or senilis (bare or aged baldness), is too well known to need any lengthened description; it is the calvities or baldness of age arising from atrophy of the piliferous organs, resulting from the contraction, or, perhaps, obliteration of the capillaries natural to advanced life; yet there are few young heads which, when shaved, do not show sundry points of this species of alopecia, resulting either from former eruptions which have destroyed the hair bulbs here and there, or from their congenital absence; such points are distinguishable by a dead whiteness of the part, in which none of that greyish tint is visible, resulting from the roots imperfectly seen through the diaphanous integument.

Very similar to this is the last species on the chart, which I have called *A. Cicatricosa*; this, as its name implies, arises from the scars constantly met with on the scalp resulting either from accident or from the destruction of the bulbs of the hair, by ulceration due to other diseases; a few hairs may often in these cases be discovered beneath the altered surface of the part, diverted, by the displacement of their bulbs occasioned by the previous disease, from their natural position, and which thus seems to have extended beneath the new epidermis, instead of transfixing it in the usual manner. I have now recapitulated the different species of baldness with sufficient detail, I trust, to render their diagnosis perfectly within the reach of ordinary attention. The divisions I have ventured to make in the disease will, it is to be hoped, enable me to adduce such general rules for their treatment as may not only prove useful, but clear away much of the confusion which, to my comprehension, has always implicated this class of complaints, when considered in connection with porrigo. Diseased baldness in its simple form may attack every age and condition; it may also be so extensive as to denude the entire body. Two such cases I have at this moment under my care; in one instance, that of a clerk in the Bank of England, there is not a natural hair on the whole body, the eyelashes even having been shed; a slight down only is discoverable, and this not in every situation usually covered, as on the chin, for example; I may also cite the case of the young woman I last week introduced to your notice, as a third example; there is very rare mention of this affection in authors, that related by *Pierre Frank* is perhaps the most extraordinary.

The treatment of these species of diseased baldness must be directed very much by their nature, as indicated by the symptoms detailed as attached to each form of the disorder; general principles, however, will regulate our proceedings in this as in all other cutaneous complaints; if the falling of the hair arise from indisposition, that of course will merit our first care; and as the strength and circulation become restored, the reappearance of hair possessing the polish and moisture of health, will be amongst the first indications of a return to convalescence.

When alopecia is strictly local, as in the varieties furfurosa and nitida, our remedies must necessarily be directed to the parts affected. These must be of a mildly stimulating nature, and applied in an aqueous, oily, or spirituous form, according as dryness or moisture may be the most prominent symptoms. Yet, under whatever treatment can be adopted, some months will always elapse before a cure can be effected, and without appropriate remedies are used, this baldness may go on for years. I have commonly advised the same means of washing and anointing for these varieties of alopecia, as I have detailed for other affections of the scalp. You will find the yolk of egg a very effectual and soothing means of cleansing the parts, and preparing them for the stimulating washes and ointments subsequently required. Every case will call for some slight modification in these applications, whilst occasionally a cachexy in the habit, or a peculiar idiosyncrasy, may merit special attention. I have often thought sulphurous washes very useful, and have applied them either in the form of dilute sulphurous acid, or by means of the hyposulphate of soda, decomposed by any dilute acid. The addition of a little glycerine, by preventing the too rapid desiccation of the lotion, is also of service. I show you two lotions, which are elegant preparations of their kind, and as far as I am aware have not been commonly used for the complaint. The composition of the first is infusion of white hellebore, bichloride of mercury, sulphurous acid, and glycerine; of the latter, hyposulphate of soda, sulphurous acid, and glycerine. I prefer that they should be applied warm; and with respect to the first mentioned, I have commonly found a few applications by means of a soft brush prevent the falling of the hair, and the extension of any diseased patches which may exist. Creosote, of the pure German kind, in solution or ointment, is also useful, and I have found covering the parts with trisnitrate of bismuth and oxide of manganese, made into a paste, with lard or glycerine, of much service. The *rationale* of its action seems to be that of checking the minute vegetation which forms the characteristic feature in the complaint in some of its varieties. Pomatum, containing cantharides and quinine, or tannin, are also often serviceable, and a French preparation, called pommade Dupuytren, is such a composition, and much sought after, as an excitant for the scalp, not only removing dandriff or scurf, but increasing the growth of the hair, by stimulating the piliferous bulbs. I am in the habit of recommending the following composition for this purpose, which is also very efficient.—Take of fresh lard and cold-drawn castor-oil, of each two ounces; tincture of cantharides, tincture of kino, and Goulard's extract, of each half a drachm; oil of rosemary, twenty drops. Add all the ingredients separately to the lard whilst briskly agitated with a silver fork, and when a homogeneous cream is formed, it must be kept in a covered gallipot for use. If shaving the head be had recourse to, oil should be used instead of soap, and no advantage arises from shaving the whole head, nor should the applications be carried beyond the diseased parts. The healing process, that is to say, the production of new hairs, always commences at the circumference, and extends towards the centre, and a patch the size of a crown will commonly require three months' perseverance with the measures recommended before it becomes covered. Several models of this disease are before you, and, according to custom, I will shortly relate a case or two selected from amongst them, and as I can produce one of the patients, whose hair is entirely grown, though you see by the cast that baldness was nearly complete, I shall first make mention of the little girl's case to whom it belongs.

Sarah Winter, aged nine, residing in Glasshouse-yard, Water-lane, Blackfriars, was admitted a patient on the 20th of June last, the head being nearly bald from the effects of porrigo decalvans of Willan, which I have designated alopecia nitida; the model before you was taken in the early part of August, when the hair had begun to reappear in

several situations, as it always does in an almost imperceptible manner, by creeping round the inner circumference of the patches. On this little girl's presentation the disease had existed two years, and of course had been subjected to a variety of treatment; the model, however, shows you that much had to be accomplished, and the aspect of the child will also demonstrate that a strumous diathesis was to be contended against, and that in an unhealthy confined dwelling, in one of the crowded London courts. However, iodide of iron extemporaneously formed, a stimulating ointment containing biniodide of mercury, and the lotion with sulphurous acid and hellebore already mentioned, soon appeared to be producing a beneficial change, so that by August 1st, before the model was cast, and a month from her admission, I was enabled to write relieved against the date of the patient's attendance; her visits were made once a fortnight, and the treatment was little, if at all, modified; the head was carefully washed with yolk of egg and tepid water (soap being strictly interdicted), the ointment being applied in the evening, and the lotion in the morning; by the end of September (the 20th is the date in the register), that is to say, in nearly three months, the baldness had disappeared; consequently an ointment containing creosote in slender proportions, so as to prove a slightly stimulating pomatum, to be used all over the head, was substituted for the former applications, and the iodide of iron was discontinued; a few drops of liquor of potash in senna tea, to be taken once or twice daily, being advised instead; and I directed the little patient to attend again in a month, that I might witness the progress of her cure, in consequence of which intimation she applied a week ago with no remains of her disease beyond an unequal length in her hair, that on the diseased patches not having attained the same growth as that which appeared on the sound portions of the scalp—a fact you may now verify by comparing the model with the case itself.

The next variety of alopecia, or that I have designated A. furfurosa contagiosa, is a tormenting but common complaint—the terror of parents and pedagogues when mentioned under the name of ringworm.

I might adduce hundreds of instances of this tedious malady, but I shall take one at random; and as the preceding cases in the register to that last recited happen to be those of children suffering under the tinea tonsurans of the French writers, and the contagious bald scurfy ringworm of our boarding schools, and which I have thence named A. furfurosa contagiosa, I will give you a short account of the treatment employed.

John Allen, aged seven, and Job Allen, aged two, children residing with their parents, Shoemaker-row, applied to the institution, as did the before-mentioned case, on the 21st of June last; both children, by their mother's statement, had suffered for upwards a year from ringworm caught at school, which manifested itself in dry scurfy patches, mostly of a circular figure, on the posterior and upper parts of the head, over the occipital and parietal bones; the hair was removed from these patches, and on close inspection much of it seemed to have been broken or torn off, a line or so above its exit from the epidermis; there was a slight itching in the parts, but no pain nor any constitutional disturbance, beyond a slight enlargement in one or two of the superficial lymphatic glands beneath the skin on the back of the neck, which appeared in the elder boy only, in whom also the alopecia was more extensive. It must be borne in mind that no pimples, crusts, or discharges, accompanied this form of ringworm, and indeed their presence would refer it to some other variety of cutaneous disease affecting the scalp.

On the forehead and shoulder of the elder boy there were two circular scurfy spots with their circumference a little more elevated and rough than the centre, which were manifestations of the same disorder as that existing on the scalp, on a part of the body not covered by hair; or, at any rate, they were caused by the contagion, and are very frequently to be observed either on the bodies of patients suffering from alopecia furfurosa, or on those of their nurses or attendants. The treatment in these cases consisted in regulating the diet, in keeping the hair cut short, in daily washings of the parts affected with yolk of egg and tepid water, and the subsequent application of the bisulphuret of mercury and creosote in the form of an ointment. The elder boy also took internally a few grains of iodide of potassium twice a-day, to stimulate the absorbents in the removal of the glandular swellings occasioned by the ringworm; and the youngest was dosed occasionally with weak infusion of senna and magnesia. No variation whatever beyond a gradual discontinuance of the means advised, was made in this plan during the two months these patients attended, at the end of which time they were discharged cured, without a vestige of their disease.

I do not think I can beneficially occupy your time by any further recitals of cases in these common affections, but, if you please, we will cast a rapid view over the different examples of maladies of the scalp ranged before you, and I think you will perceive that it is not only incorrect, but almost ridiculous, to consider them all as belonging to the genus porrigo.

Every cutaneous disease hitherto considered may affect this part of the body, as also some of those which I have not hitherto noticed; and you will observe cases of lepra, psoriasis, impetigo, eczema, and others, amongst the casts, and I am sure discover, at a glance, that they cannot belong to one form of disease; yet I am bound in good faith to tell you that the same irritation in peculiar individuals, and idiosyncrasies, will produce a totally different form of cutaneous eruption not only in the scalp, but also in any part of the human integument; hence, perchance, much of the confusion that has arisen in describing and understanding these diseases, and the many disappointments which have accrued from treating all cases alike, spring from one common cause; for it can scarcely be necessary to remark that nearly every case will require a particular and somewhat special treatment, according to the indications, not only of the various manifestations I have mentioned, but also of the many constitutional peculiarities. In no disease of the skin will this observation be found of greater importance than in scabies or common itch, the subject to which I am desirous your attention should next week be directed; and I am sure no better exemplification can be found than that furnished by this disease of the remarks just made, concerning the diversity of effects originating from a single source of irritation.

ORIGINAL CONTRIBUTIONS.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery in St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

FIBROUS TUMOUR.

(Concluded from page 214.)

S. M., aged forty-three, single, haggard, and emaciated; abdomen of the form and size of a seven months' pregnancy.

June, 1843. Complains of a solid swelling at the lower part of the abdomen, which has been gradually increasing in size since it was first observed, some three or four years ago. On careful examination, it is not quite uniform, either in shape or hardness, being more prominent and resisting in some directions than in others. Across the abdomen, nearly on a level with the umbilicus, it is so elastic as to almost induce the expectation of being able to feel fluctuation. The greatest tenderness on pressure is where it is hardest; but the presence of the mass does not appear to produce much suffering, beyond that arising from its weight, and the distension of the abdominal parietes. There is much gastric and intestinal derangement; little or no appetite; tongue red, glazed, and fissured; evacuations very unhealthy, with but little appearance of bile in them; catamenia regular; suffered from dysmenorrhœa in early life.

Examination per Vaginam.—Os uteri pushed forwards, projecting from a solid mass of fibrous tumour, which fills the upper portion of the pelvic cavity, and is evidently a portion of the mass which forms the abdominal enlargement.

States that she first noticed the presence of a tumour in the abdomen in 1839, after having suffered a good deal from pain of the right hip, extending down the right thigh.

The debility, emaciation, and general functional derangement in this case were so great when I first saw her, that I had great reason to fear a complete break up of health and strength, and I accordingly turned my attention entirely to restoring the digestive organs to a healthier state of action. She was accordingly put on the use of sarsaparilla and lime-water, extr. taraxaci, gentle laxatives when necessary, and an occasional dose of blue pill or hydr. c. cretâ, according to circumstances. She also rubbed in some ung. potassii iodidi on the projecting parts of the tumour, and afterwards the ung. iodinii comp., until the skin became irritable and sore, but without any perceptible effect on the condition of the tumour, although the general health improved under the use of the sarsaparilla, &c.

Nov. 9. Was seized with severe pain of abdomen and pelvis, extending to the lowest part of the back, and accompanied with vomiting, diarrhœa, and much febrile excitement, for which the treatment was pursued. No diminution in of the tumour was observable in consequ this attack.

Sept., 1844. As nothing had been done beyond regulating the general health and improving her strength, and as the tumour, if in any degree changed, was increased in size and hardness, I deemed it worth while to try the effects of sion cautiously applied. This she effected by means of two light mallets, smartly rapping the abdomen morning and evening for about ten minutes at a time. She continued this for some weeks, and then left it off for a while, and again resumed it. The abdomen decidedly became softer, but very tender to the touch.

October, 1844. *Examination per Vaginam.*—The tumour is so high above the brim of the pelvis that it can scarcely be reached by the finger, and then only when she is in the erect posture. I was unable to introduce the uterine sound. After the use of percussion had been persisted in for some time, she had an attack of menorrhagia, lasting, on and off, for nearly three months, which weakened her a good deal. She feels certain that the mass has not increased since commencing this treatment, but has rather, if anything, diminished. During the following year (1845) nothing was done beyond regulating the general health by sarsaparilla, lime-water, and extr. taraxaci, and at times putting her upon a course of muriate of lime, either in infusion of gentian or orange.

In January, 1846, I decided on using more active measures. On examination per vaginam, the mass was much lower in the pelvis, the os uteri easily within reach, and with some difficulty, after a little manipulation, the uterine sound passed to the extent of four and a-half inches, pretty nearly into the centre of the tumour. The canal was evidently much contorted, as the point of the instrument varied its direction considerably as it gradually advanced. It seemed to produce little or no pain. I applied leeches by the speculum to the hardest and most prominent portion of the tumour, which could be reached per vaginam, and in a few days afterwards began to imbed the os uteri in some unguent. hydrarg. fortius. I continued this application about once a-week during February, and on

March 6, 1846, I introduced a good sized silver male catheter, filled with melted mercurial ointment, into the uterus, and discharged it into the cavity, and then imbedded the os uteri in a lump of the same ointment, rendered sufficiently hard by the addition of some ceratum cetacei.

9. Was seized with severe pain of abdomen, extending to the back; the tumour was very hard and tender; she had smart vomiting and diarrhœa. A hot linseed-meal poultice was applied over the abdomen, and she took a dose of castor-oil. The poultice was renewed twice, with much relief.

June 9. I have passed the silver catheter charged with ointment into the cavity of the uterus on seven or eight different occasions, without any pain or inconvenience. The canal into the uterus admits

the catheter more easily, and the cavity of the organ itself seems larger. Sometimes I passed up a piece of mercurial ointment to the os uteri; but at others, I merely injected the contents of the catheter into the uterus. The catamenia appeared on the 3rd of May, and lasted three days. They were quite natural in appearance, and without coagula. The abdomen feels much softer, and evidently divisible into two or more masses, with an interstitial matter, which is softer, and therefore enables them to move somewhat upon each other. The abdomen measures thirty-two inches; it had hitherto measured thirty-four inches, and yet she has rather gained flesh than otherwise. Tongue natural; bowels regular; no ointment came away after the injection; says that she has lost the sensation of weight and tightness about the abdomen, and feels much lighter when she moves.

R. Extr. taraxaci, ʒj, ex Liquore calcis c. lacte, bis die.

16. I injected some ointment on the 12th; the catheter passed without any obstruction, and evidently into a distinct cavity, which seems larger than before; the ointment did not come away; she states that the lower edge of her stays overlaps an inch; tongue and bowels natural. Pt.

23. I injected twice the quantity of ointment which I had formerly done; the catheter passed as readily as before; she had no pain afterwards, but felt an oppression of her breathing, which she relieved by a sinapism to the epigastrium. Pt.

Some apology is perhaps necessary for giving a report of an unfinished case; but I was unwilling to leave the subject of fibrous tumour without communicating the results of a treatment to which I believe I have already alluded, viz., the introduction of mercurial ointment *into* the uterine cavity. Although I had succeeded by general treatment in producing a considerable improvement in the patient's health, the tumour appeared to be slowly increasing both in size and hardness, and from its prominence gave her the appearance of a woman in the seventh month of pregnancy. The almost entire absence from pain and tenderness when examined gave no indications for the use of leeches; and recollecting having seen many years ago in a medical journal some reports on the use of percussion in these affections, I determined to make trial of it in the present case. Although little or no change of size was perceptible, yet the mass became evidently softer, and more tender to the touch; and I now regret that I did not avail myself of this favourable opportunity for applying leeches. A smart attack of menorrhagia followed, to which I am more inclined to attribute the slight diminution of size which was supposed to be observed.

It was not, however, until the beginning of the present year that I adopted a more active treatment. The tumour in October, 1844, was so large that it rested on the brim of the pelvis, and the os uteri could only be reached with considerable difficulty; but on examination in January, 1846, it had evidently undergone a considerable alteration in size. The lower part had entered pretty deeply into the pelvis, and enabled me to examine the uterine cavity with the sound. As one portion which was to be reached per vaginam felt very hard, I applied some leeches to it, and shortly afterwards commenced the use of the mercurial ointment. The increasing softness of the mass under the local application of mercury was the first symptom of decided improvement which I observed; it evidently consisted of two or more hard tumours, with softer structure between them, so that they were easily movable on each other to a small extent. At other times, however, especially just before the catamenial periods (which have throughout been tolerably regular in point of occurrence, although frequently sparing and discoloured), the whole mass would become tense and hard. The increasing facility with which the catheter has been introduced, and the evidence of greater mobility when introduced, shows that the uterine cavity is enlarged, which I presume we may fairly attribute to the action of increased absorption going on in those parts to which the mercurial ointment has been more immediately applied. There has been no discharge, and on several occasions the injected ointment has not returned.

The diminution of size is now becoming very apparent, and the feeling of increasing lightness, and the capability of moving about, hold out hopes of still further improvement.

I reserve another and somewhat similar case for my next report, and will then pass on to the consideration of some other affection.

HEMORRHAGE FROM THE BOWELS DURING FEVER.

By W. Iliott, Esq., Bromley, Kent.

The occurrence of hemorrhage from the bowels, during the progress of fever, has been, by most authors, regarded as an unfavourable symptom. Fortunately, it is not very often met with. In the autumn of 1828, several of the cases of fever, occurring in this neighbourhood, were attended with discharge of this nature. The late Dr. Sutton, of Greenwich, bore his testimony to the greater frequency of the symptom, at that period; and, having kindly visited a patient of mine, affected with fever, and alvine hemorrhage, he said that he thought that death was almost invariably the result of such cases; and in the individual instance, his prognosis was correct. My subsequent experience, in more than one instance, did not confirm Dr. Sutton's views. Indeed, on considering some of the leading symptoms attending the various cases, I came to the conclusion that there were no distinct species, and thought that I could lay down a pretty clear and safe diagnosis to guide the medical attendant, and which would, of course, influence his prognosis also. I therefore wrote some remarks on the subject at that time, which were favourably spoken of by the late Dr. Muton. In these remarks I stated that the sanguineous discharge which might be pretty generally expected to bring a fever to a fatal termination, was almost always small in quantity; it never appeared to be critical; it consisted of arterial or bright-red blood, generally mixed with the evacuations; it usually showed itself some time between the seventh and eleventh day of fever; there was, commonly, an interval of two days between each discharge, which occurred some time in the night; the patient did not, at first, feel the worse for the loss of blood, but perhaps a little better; but in all the cases I had met with, this complication had produced a train of the very worst typhoid symptoms, and death had been the hitherto invariable result. The general tendency of the bowels in these cases was towards a slight diarrhœa, but which never appeared to be critical; and there was commonly an appearance about the patients of a somewhat relaxed habit. I stated that I knew of no particular antecedent circumstances to account for the occurrence of this hemorrhage; nor had I, as yet, found any treatment that would arrest the progress of the case towards a fatal result. I noticed the analogy between these cases, and those related by Dr. Armstrong in his work on fever, as being attended with petechiæ, and other hemorrhages; though, in my own experience, I had often seen one set of symptoms without the other.

I then described a train of symptoms, also occurring about the same period of fever, or perhaps a little later, the leading feature of which was a constant sense of heat and dull pain about the præcordia; often a great degree of sickness, without vomiting; this heat was intolerable and irremoveable, though somewhat relieved by the lancet, saline aperients, and antacids; till there came on, also in the night, one, two, or more profuse discharges of pure blood, quite black, and without any feculent matter. In these cases, the bowels were generally, but not remarkably, costive; the motions usually were pale. The primary effect of this discharge, in patients much weakened by a twelve or fourteen days' fever, was great prostration; but in all the cases I had met with, the discharge had been critical, and the patients had recovered. I took the pains to point out a clear distinction between these cases, and those of melæna (although much alike in some of their features), by proving that they were preceded by idiopathic fever, and had always occurred in families where more than one case of genuine fever had previously appeared During my subsequent experience I have had no doubt thrown on the correctness of my views on this subject, and I have, within these last few weeks, met with two very striking instances of the salutary form of the complaint. I have not preserved any notes of the cases, not supposing that they would be worth recording; and, indeed, I do not believe that the inferences to be drawn from them would be much affected by a detail of antecedent or subsequent symptoms. Suffice it to say, that the first patient is a boy, of twelve years, of very robust habit. In his family no less than six cases of fever had occurred, besides his own, during the last autumn and winter. In the father, mother, and himself, the gastro-hepatic functions were more particularly deranged; three little children, all under eight, had great derangement of the brain and nervous system; in a youth of nineteen, the disease was very slight, and ephemeral. In the case of hemorrhage, it made its appearance about the twelfth day of fever. There was not much heat, but great pain, about the scrobiculus cordis for some days previously. More than half a chamber-pot full of black blood was voided, at once, in the night; and the relief was permanent; the hemorrhage has not been repeated. There was great prostration at first; the cerebral functions were much deranged for three or four days, and in a minor degree for a fortnight; but the boy is now convalescent. The other subject is a married woman, of fifty-three, of good general health. Two of her granddaughters, under seven, and her son, aged thirteen, had fever in the same house, before the hemorrhage occurred; the granddaughters had great cerebral disturbance. The woman had, for four or five days before the hemorrhage, great sickness, with vomiting of pure bile, and severe hypochondriac pains; also costive bowels. She has also had, and still has, severe bronchial irritation, with cough and mucous expectoration. The hemorrhage began in the night, about the thirteenth day of fever; at first it was in large quantity, of pure black unmixed blood; afterwards with less blood, and an admixture of greenish yellow fæces; the action of the bowels, and colour of the fæces are now natural. The patient was, at first, alarmingly cut down, but has now no symptoms remaining, except the bronchial, and is fast getting well. The first of these varieties of alvine hemorrhage has been well described by Dr. Armstrong; the second has been confounded by him, and others, either with the form first described, or with the bilious hemorrhage, so minutely detailed and so well explained by Dr. Ayre. The only author on fever who appears to have allowed that this kind of hemorrhage sometimes produces a crisis, in fever, is Dr. Thomas Bateman; and he gives an account of one case only. I have, at this very time, a young hysterical female, just recovering from one of Dr. Ayre's cases; the only difference is, that I believe the sanguineous discharge is in her case somewhat vicarious with the obstructed menses; and there is not in her family, nor in the neighbouring houses, a single case of fever; neither has she been attacked with any febrile symptoms. I am happy to say, that I have not met with an instance of the fatal kind of alvine hemorrhage for a long time. I think, therefore, the marked distinction between the leading features and the almost constant result, of these two species of hemorrhage, is a point worthy the attention of the profession at large. I have found some practitioners not at all alive to the danger of alvine hemorrhage in fever, hailing it, indeed, as a favourable symptom; while others, warned by unfortunate experience, have been inclined to despair in all cases. Thus, either false hopes have been excited, or equally ungrounded and unnecessary alarm. In each instance the medical man has lost credit for sagacity. I believe, by attending to my remarks now, and those in 1829, both evils may be avoided. And further, believing that every fact should be recorded, which can improve either our diagnosis, or prognosis, I do not apologise to my professional brethren, for proposing, in the present instance, to occupy a portion of the widely circulated *Medical Times*, with a detail of my views on the subject.

ON THE POWER OF THE MIND OVER THE BODY:

AN EXPERIMENTAL INQUIRY INTO THE NATURE AND CAUSE OF THE PHENOMENA ATTRIBUTED BY BARON REICHENBACH AND OTHERS, TO A "NEW IMPONDERABLE."

By JAMES BRAID, M.R.C.S. Edin., &c., Manchester.

(Concluded from p. 254.)

In consequence of the statements made in the third section, of the tranquillising effect of causing highly sensitive patients to lie with the head towards the north, and the extreme discomfort of other directions of the body in reference to the magnetic meridian, I caused a patient who had long been an extreme sufferer, and in whose welfare I felt the deepest interest, to submit to the trouble of such a change in the position of her bed, but I am sorry to add it was not followed by any beneficial effect.

I am perfectly aware that the results of a single case are not competent to refute what has been alleged as proved by a number of others. However, I have stated my fact on the point, and whilst I readily admit my firm conviction that with sensitive patients, who, from whatever cause they may have imbibed notions that certain directions of the body, either when asleep or awake, might be followed by feelings of physical, as well as mental, discomfort, the mere idea would be adequate to the production of such effects. Still I do not believe there is any adequate *physical* cause for such results, merely as regards the polarity of the earth and the human frame. The following are the grounds for this opinion:—The constitutional parts of the human frame are all *diamagnetic*, that is, under the magnetic influence they have a tendency to assume the *equatorial axis*, instead of the *polar* direction, and it therefore appears to me extremely improbable that a combination of *diamagnetics* should, merely in consequence of their combination, become invested with *the very opposite qualities of the constitutional parts.* To say the least of it, this would be at variance with all which has yet been ascertained of such powers in the inanimate, physical, and chemical world. It therefore appears to me that the peculiarities referred to by Baron Reichenbach under this head, are more likely to have arisen from a *mental*, than a *physical*, cause.

A few days after the above paragraph was written, I read it to a most intelligent friend, who then told me that she had just received a letter from her brother, who had been attending some lectures by Professor Faraday, and kindly offered to send me an extract from his letter, corroborative of what I had read to her. The following is the extract, which I received the following morning, and which is particularly gratifying, coming, as it does, from the very highest authority we have on this subject:—"I have been greatly interested lately with a course of lectures by Faraday on Electricity and Magnetism, which I am sorry to say is just concluded. You will, no doubt, be gratified to learn that, in common with the whole human race, you are a *magnet*, with this peculiarity only, that if suspended by the middle you will point eastward and west, instead of north and south, with which interesting fact I leave you to your meditations."

The mesmerists who have entertained the opinion that the sleep and other phenomena occurring during their process arose from a magnetic fluid, or some special influence issuing from their persons, and passing into that of the patient, of course hail these speculations of Baron Reichenbach as demonstrative proof of the correctness of their theory of mesmerism. Some of their patients having declared that they saw blue or variegated sparks passing from the fingers of the operator, when making passes, when mesmerising a patient, water or any inanimate object; or that they saw a blue fluid, or one of still brighter hue, issuing from the eyes of the operator, or darting towards them, when gazing fixedly for the purpose of mesmerising; or that they perceived a luminous halo surrounding the head of a person engaged in deep thought, must have felt gratified by the announcement, considering it well calculated to confirm in their minds the belief in the physical entity of the agent. But when those patients have farther described that when the operator has been engaged in *silently willing*, for example, that a patient should be made to come towards him, there is seen by the patient a stream of something passing from the head of the operator to that of the patient, like a rope, and that he not only *sees* this, but *feels* its influence *as a rope*, or innumerable threads drawing him irresistibly towards the operator, the entity must now appear fully confirmed. But when, in addition to all this, some of these subjects become at length so accomplished as to be able to perceive these appearances *in the wide waking state*; it is most natural that those whose long cherished opinions lay in that direction, should jump at the conclusion that now the point is fully and satisfactorily settled. Under such a combination of circumstances certain individuals may be excused for overlooking what to others is a very obvious source of fallacy, namely, the tendency of a continued fixed gaze to confuse the vision, and of a fixed idea and expectation to confuse and bewilder the mind.

It is well known that the undue excitement of an organ disturbs the normal functions of such organ; and that in a state of fever, or delirium tremens, and various morbid states of the nervous system, and even in the healthy state during dreaming, the patient imagines that he feels, and sees, and hears, all sorts of forms, colours, sounds, &c. We do not on that account subscribe our belief in the reality of the objects or impressions which an individual under such circumstances believes that he has seen, heard, or felt, or the imaginary feats he alleges he has accomplished. In such cases we estimate the phenomena as mere mental delusions; and such I apprehend ought to be our conclusions in reference to these extraordinary and startling allegations of Baron Reichenbach and the mesmeric patients; inasmuch as patients can throw themselves into the sleep and manifest all the usual phenomena of mesmerism, through their own unaided efforts, as I have so repeatedly proved, by causing them to maintain a steady fixed gaze at any point, concentrating their whole mental attention on the idea of the object looked at; or that the same may arise by looking at the point of the patient's own finger; or, as the Magi of Persia and Joghi of India have practised for the last two thousand four hundred years for religious purposes, throwing themselves into their extatic trances by each maintaining a fixed gaze at the tip of his own nose, it is obvious there is no need for an exoteric influence to produce the phenomena of mesmerism.

The agency may be entirely subjective or personal, and, in such cases as I have illustrated by extracts from Ward's History of the Hindoos and the Dabistan, through certain associations of ideas, the patients can see and imagine as much, or indeed far greater wonders than are recounted by our most successful mesmerists of modern times, with all the additional aid of their alleged mesmeric fluid. In proof of this, I beg to refer to my papers in the *Medical Times*, p. 272, vol. xi. The great object in all these processes is to induce a habit of abstraction, or concentration of attention, in which the subject is entirely absorbed with one idea, or train of ideas, whilst he is unconscious of, or indifferently conscious to, every other object, purpose, or action.

I had long been familiar with the fact that, during a certain stage of hypnotism, patients may be made to give various manifestations or declarations of their feelings and notions, according to previously existing ideas or suggestions imparted to them during the sleep; and moreover that such associations once formed, were liable to occur ever after under similar combinations of circumstances. As occurs in ordinary dreaming, they seem generally at once to adopt the idea as a reality, without taking the trouble of reasoning on the subject, as to the probability of such ideas being only imaginary; and their extreme mobility in the hypnotic state renders them prompt with their corresponding physical responses. In proof of this, and how readily persons inattentive to these facts may misapprehend what they see realised in such cases, I beg to submit the following interesting illustration:—When in London lately, I had the pleasure of calling upon an eminent and excellent physician, who is in the habit of using mesmerism in his practice, in suitable cases, just as he uses any other remedy. He spoke of the extraordinary effects which he had experienced from the use of magnets applied *during the mesmeric state*, and kindly offered to illustrate the fact on a patient who had been asleep all the time I had been in the room, and in that stage during which I felt assured she could overhear every word of our conversation. He told me that when he put the magnet into her hands, it would produce catalepsy of the hands and arms, and such was the result. He wafted the hands, and the catalepsy ceased. He said that a mere touch of the magnet on a limb would stiffen it, and such proved to be the fact.

I now told him that I had got a little instrument in my pocket, which, although far less than his, I felt assured would prove quite as powerful, and I offered to prove this by operating on the same patient, whom I had never seen before, and who was in the mesmeric state when I entered the room. My instrument was about three inches long, of the thickness of a quill, with a ring attached to the end of it. I told him that, when put into her hands, he would find it make both hands and arms rigid, as his had done, and such was the result. Having reduced this by wafting, I took my instrument from her, and again returned it *in another position*, and told him it would *now* have the very *reverse* effect—that she would not be able to hold it, and that, although I closed her hands on it, they would open, and that it would drop out of them, and such was the case, to the great surprise of my worthy friend, who now desired to be informed *what I had done to the instrument to invert it with this new and opposite power.* This I declined to do for the present, until he had seen further proofs of its remarkable powers. I now told him that a touch with it on either extremity would cause the extremity to become cataleptic, and such was the result; that a second touch on the same point would reduce the rigidity, and cause it to fall, and such again was proved to be the fact. After a variety of other experiments, every one of which proved precisely as I had predicted, she was aroused. I now applied the ring of my instrument on the third finger of the right hand, from which it was suspended, and told the Doctor that, when so suspended, it would send her to sleep. To this he replied, "*it never will*," but I again told him I felt confident it would send her to sleep. We then were silent, and very speedily she was once more asleep. Having again aroused her, and put the instrument on the second finger of her left hand, I told the doctor it would be found she could *not* go to sleep when it was so placed. He said he thought she would, and he sat steadily gazing at her, but I said firmly and confidently that she would not. After a considerable time, the doctor asked her whether she did not feel sleepy?—to which she replied "not at all" "Could you rise and walk?"—to which she answered that she could. I then requested her to look at the point of the forefinger of her right hand, which I said would send her to sleep, and such was the result; and, after being aroused, I desired her to keep a steady gaze at the nail of the thumb of the left hand, which would send her to sleep in like manner, which also proved to be the case.

Having repaired to another room, I now explained the real nature and powers of my little, and apparently magical, instrument; that it was nothing more than my *portmanteau key and ring*, and that what had imparted to it such apparently varied powers was merely the predictions which the patient had overheard me make, which acted upon her, in that peculiar stage of the nervous sleep, as irresistible impulses to be so and so affected, according to the results she had heard me predict. Had I predicted that she would see any colours, or flame, or form, or substance, animate or inanimate, I know from experience that such would have been realised and responded to by her; and that not from any desire on her part to impose upon others, but because she was self-deceived—the vividness of the imagination in that state inducing her to believe to be real what were only the pigments of fancy, suggested to the mind by the remarks of others. The power of suggestions of this sort also, in paralysing or energising muscular power, is truly astounding, and may all arise in perfect good faith with almost all patients who have passed into the *second* conscious state; with some, during the *first* conscious stage; and with some weak-minded, or highly imaginative, or credulous people, *even in the waking state.* The true cause of these vigilant

phenomena is not a physical influence from without, but a mental delusion from within (the mind being wholly absorbed by a predominant idea), which paralyses their reason and independent volition, so that for the time being they are rendered mere puppets in the hands of another person, by whom they are irresistibly controlled, so that they can only see or hear, taste, feel, or act, in accordance with his will and direction. They consequently have their whole attention fixed on what may be said or signified by this alleged superior power, and consequently they perceive impressions, through the excited state of the organs of sense that are called into operation, which they could not perceive in their ordinary condition; and this sort of clairvoyance, or thought reading, the mesmerists attribute to some special influence, such as the new imponderable of Reichenbach. So soon as such patients can be made to believe that in the waking state the evidences of their senses is more trustworthy than mere ideal or suggested impressions, and that they can really exercise their own independent powers, in opposition to the alleged power of the will of another, through his auricular suggestions, or passes, and other manœuvres, it will be instantly found that the spell is broken, and that rational beings can no longer be magnetically tied together, or to chairs, tables, or the floor; or made to see an object of every different colour and hue; or metamorphosed into every nature, form, or creature, the operator may incline to and direct. It may have been interesting enough to have demonstrated that the human mind could be so subjugated and controlled; but, as I have formerly said in your pages, and beg leave to repeat, I do not consider the *continual repetition of such experiments in the waking state as at all proper*, or free from the danger of throwing the faculties of the mind of such subjects into a permanently morbid condition.

It would be inconsistent with the scope of this paper to occupy your columns with an elaborate detail of my views as to the philosophical explanation of the modes of exciting and varying certain trains of ideas, and their consequent manifestations, during the nervous sleep. The inquiry is not only curious, but also one of great interest, in respect to the power of the mind in controlling physical action, and of physical impressions in reacting on the mind. I have given a pretty ample discussion on these topics in a second edition of my little work on hypnotism, now preparing for the press, to which I beg leave to refer those who feel desirous of prosecuting the inquiry, and particularly those who desire to do so for curative purposes.

Having thus far investigated Baron Reichenbach's speculations, and proved, with many more patients than he refers to, the major propositions to be erroneous respecting the phenomena which he thinks result from a *new imponderable*, I consider it unnecessary to prosecute the subject in the minor details. I may, however, remark, that I can readily imagine, from the excited sensibility of particular individuals, and their highly concentrative state of mind, that they may be competent to detect electric, calorific, and physical qualities of bodies, which would escape the observation of themselves and others, when in the ordinary and less sensitive condition.

In conclusion, I beg particularly to remark, that whilst my experiments and observations are opposed to the *theoretical notions* of Baron Reichenbach and the mesmerists in all the more important points, they directly confirm the reality of the facts, as to the power which we possess of artificially producing certain phenomena by certain processes; as also of intensifying effects which arise in a minor degree spontaneously, or by the patient's own unaided efforts. They allege that the exciting cause is the impulsion into the body of the patient from without of a portion of this new force; whilst I attribute it to a subjective or personal influence, viz., that of the mind and body of the patient acting and reacting on each other in a particular manner, from the intense concentration of inward consciousness on one idea, or train of ideas, which may to a certain extent be controlled and directed by others. This latter controlling power, however, arises merely from the mental and physical impressions producing still greater concentration of the patient's mind in a particular direction, that is to say, by concentrating their attention to the point over which they see anything drawn, or upon which a calorific, frigorific, or electric impression is made; when, by a greater supply of nervous influence and blood, and vital action drawn to the part, from the *physical and mental resources of the patient*, and not of the person or substance exciting those physical impressions, they enable the patient more effectually to concentrate his own vital powers, and thus to energise the function, on the same principle as a patient affected with anæsthesia or loss of feeling, is able to hold an object in his hand as long as he looks at it, but will allow it to drop when his eyes are averted.

It is worthy of particular remark that my researches prove the power of the concentration of inward consciousness, as not only capable of changing physical action, so as to make some patients in the wide waking state imagine that they see and feel from an *external* influence, what is due to an *internal or mental* cause; but I have *extended* the researches so as to prove that the *same law obtains in respect to the other organs of special sense, and different functions of the body.* My theoretical views, therefore, instead of diminishing, rather enhance the value of this power as a therapeutic agent. They strikingly prove how much may be achieved by proper attention to and direction of this power of the human mind over the physical frame, and *vice versa*, in ameliorating the ills which flesh is heir to. I beg further to remark, in support of my views, that in the experiments of Baron Reichenbach and the mesmerists generally, all which I have endeavoured to prove as requisite for the production of the phenomena referred to, is necessarily brought into play during their processes, *in super-addition to their alleged mesmeric fluid or new force.* Of the latter, therefore, under such circumstances, I maintain we have as yet had no direct and satisfactory proof, and it is unphilosophical to attribute to a *new* and *extraneous force*, what can be readily and fully accounted for from the *independent, physical, and psychological powers of the patient*, which must necessarily be in active operation along with their processes and alleged "new imponderable."

My experiments, moreover, beautifully and satisfactorily prove the *unity* of the *mind*, and the remarkable power of the soul over the body.

3, Peter's-square, Manchester, June, 1846.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS I'ANSON, Esq., of St. George's Hospital.

SURGICAL CASES.

CASE II.

Case of Calculus in the Bladder.

John Button, aged sixty-four, grocer—admitted by Mr. Cutler.

Feb. 6. States that five years ago he first perceived symptoms of stone in his bladder, under which he laboured for nearly two years, at the end of which time he came to the hospital, and had it crushed by Mr. Cutler; he continued free from that time until three months ago, when he first found some little difficulty in passing the last drops of urine; he took little notice of it at first, but the difficulty continued to increase with a frequent desire to make water; and he has consequently again presented himself. He now has an itching pain at the end of the penis, and also at the lower part of the rectum; when he voids his urine in the standing posture the stream suddenly stops, but if he then places himself in the recumbent posture he is again able to pass urine; he has had great pain at the bottom of the bladder after any unusual exertion, or after riding in a shaking vehicle; the urine is high coloured and alkaline; he cannot retain it for more than an hour at a time, and does not void more than a quarter of a pint at once. A metallic sound being introduced into the bladder, the presence of a calculus was clearly made out; the instrument appeared to pass over a rather large extent of surface, which was rough, and it required some slight degree of force to move it from its position.

10. This morning his bladder was injected with about six ounces of warm water, and a lithotrite introduced, in the lower blade of which was a slit corresponding to several wedge-shape projections in the upper one; the upper blade was now withdrawn for a distance of eight or ten lines, and by a slight jerk of the instrument the stone was felt within its grasp, then the screw was turned with a gentle force so as to approximate the blades, and the instrument withdrawn, bringing with it several fragments of a calculus; this was repeated several times, and then a lithotrite with a hollow in each blade was used, which brought away a large quantity of fragments; the water was then drawn off by a large catheter, bringing with it some more of the calculus, and a second quantity injected and immediately drawn off. He was then placed in bed, and thirty drops of laudanum administered.

11. He has passed a good night, and complains only of soreness in the urethra; urine but slightly tinged with blood.

12. A few more fragments have been extracted with the hollow-bladed lithotrite.

Rep. Tinct. opii *m*. xxx.

16. Does not void his urine nearly so frequently, and it is acid: but he has some pain about the neck of the bladder as the last drops are coming away. A small fragment extracted.

19. Urine acid, and he can retain it for three hours at a time; he has some slight irritation about the neck of the bladder, but no more fragments could be detected.

22. Left the hospital, with directions to return if he had any of his former symptoms.

[The fragments of the calculus were of a light grey colour; about three drachms in quantity; not fusible by the blow-pipe; evolved ammonia on the addition of liq. potassæ; and were soluble in muriatic acid.]

REMARKS.

The *symptoms* of a calculus in this case were well marked; while it was small and only recent, it merely gave rise to a little irritation about the neck of the bladder, occasioned by the stone falling against it as the last drops of urine were coming away; but as it rapidly enlarged, this irritation was soon changed for pain at the part, extending to the glans penis and lower part of rectum; he also had a sudden and frequent desire to make water, which was voided in small quantities at a time, and the stream was frequently stopped, from the stone blocking up the inner orifice of the urethra, if he now altered his position, and of course at the same time that of the stone, the stream again flowed; the symptoms were much aggravated by any jolting exercise. His urine was alkaline, showing that a phosphatic deposition was taking place, and also causing his health to suffer, as Sir B. Brodie has shown (Diseases of Urinary Organs, p. 264) both from its being more stimulating to the bladder than healthy urine, and also because that state of the health which causes it to be secreted, is attended with an increased and morbid sensibility of the nervous system; had he not now been relieved, the constant irritation would have soon induced chronic inflammation of the mucous membrane of the bladder, when there would have been great increase of the pain, the urine would have been voided more frequently, and would soon have become of an ammoniacal putrid odour; the mucous membrane would have secreted a thick tenacious mucus, containing phosphate of lime, part coming away in the urine, and part mixing with, or being deposited on, the former calculus. After some time this chronic inflammation might have become acute, when it would have extended up into the kidneys; or caused abscesses external to the cellular tissue of the bladder.

The most frequent *cause* of vesical calculus is one originally formed in the kidney, having made its way into the bladder, but which has been unable either from its size or from enlargement of the prostate gland, to pass the urethra; it may also, though more rarely, be from a deposit around some foreign body, as a broken catheter, or bougie. Most probably the first formation of the stone which was crushed three years ago in this patient, began with

a deposit from the urine in the bladder on a rena calculus; it is also very likely that the present formation was from the same cause acting a second time; I cannot imagine that it was from a fragment left after the former operation, for surely he would have had some slight occasional symptom of its presence, even though it would not have enlarged while the urine continued healthy; we may suppose that the nucleus (as it generally happens) was composed either of lithic acid, or oxalate of lime. Now, if his health had continued good, the additions might have been of the same chemical composition; but either some impairment of the health, or the irritation of the nucleus, or both conjoined, caused the urine to be alkaline, and then deposits of the triple phosphates of ammonia and magnesia took place; the theory of the formation of which, according to Dr. Prout, is, that in certain states of the system the urine forms a greater quantity than usual of phosphate of magnesia; under the same circumstances the urea is decomposed, ammonia evolved, which, combining, with the phosphate of magnesia, forms the triple phosphate, and as this is insoluble, it is precipitated in the form of a white powder. Dr. Prout also informs us that the phosphates seldom form a nucleus, but when once they are deposited they continue to be so, and are not followed by any other formation, so had this been extracted entire, as in lithotomy, on sawing it across we should have found a nucleus in the centre of a different formation to the rest of the calculus. Persons of his age are more liable to stone than the middle aged, which latter class are also more exempt than children. The triple phosphate is perhaps the form most frequently found in the bladder, especially of old persons. I have explained, however, before, that it generally has a nucleus of a different description; next, perhaps, the lithic acid, and oxalate of lime; then the fusible calculus, more rarely phosphate of lime; lithate of ammonia is most frequently found in children; lithate of soda perhaps arises from the immoderate use of soda, in persons of a lithic acid diathesis; the cystic oxide, carbonate of lime, zanthic oxide, and fibrinous calculus, are found still more rarely. But the kind of formation depends greatly on the health of the individual; if there is no evident derangement of the health, the lithic acid may continue to be formed; but if the health becomes affected, this will be coated with the triple phosphate; and lastly, from its irritation inducing chronic inflammation of the mucous membrane of the bladder, this will be mixed with phosphate of lime, and the fusible calculus formed. Had these symptoms depended on diseased prostate, he would have had no aggravation of pain on being in a jolting vehicle, or after any unusual exertion, which he had, to a great degree, in the present instance. There would have been difficulty in first getting the stream to flow, also. There may be sometimes in children, from the irritation of sand, all the symptoms of stone without there being one in the bladder.

To make sure that the diagnosis was correct, a metallic sound was introduced (as, indeed, is necessary in every case), and its presence, and indeed its size and shape, in a great measure determined; sometimes, however, when a stone is of small size, it is not readily felt by the sound; here Sir B. Brodie introduces an elastic gum catheter while the bladder is full of urine, and as the last drops are coming away, the stone falls on the instrument, and it may then be felt distinctly; but if a stone should become lodged in a cyst formed by a protrusion of the mucous membrane of the bladder between its muscular fibres, the sound will fail in detecting its presence; in fact, this happened in the cases which were treated by a lady who obtained a large sum from government for curing stone by certain solvents; as the stones disappeared while the patients were under her treatment, they were supposed to have been dissolved; a post-mortem examination, however, proved the contrary.

The rapid formation of the stone, its roughness, and the alkaline state of the urine, led to the conclusion that it was phosphatic; had it been longer in forming, and felt smooth, and had the urine been acid, we might have inferred that it was lithic acid; when the fragments were brought away it was proved that the conclusion was right. Had this patient applied when the calculus was only a very little larger than the urethra, it might have been made to pass by dilating it, and then giving diluent drinks, when it might have been forced out with the stream of urine; but when it was rather too large for this to succeed, it might have been extracted by the urethra forceps, first invented by Sir A. Cooper, and since improved by Mr. Weiss. However, it had grown to such a size that either of these methods was out of the question; there then remained the choice of two operations, lithotrity or lithotomy; the former was chosen, and performed for the following reasons: that there is no danger of dividing the neck of the bladder with the loose cellular tissue external to it, which readily inflames and sloughs; that there is no danger of wounding the vessels of the perineum, which, in old persons, are much enlarged, and when deep seated cannot easily be commanded; the shock to the constitution is not so great, which, indeed, is a great point gained, especially if there is any organic disease, as often happens with regard to the kidney when a stone has existed for many years.

Lithotomy is preferable in boys, because their perineum is more shallow; their urethra would be too small for the introduction of the lithotrite, and too small for the escape of the fragments afterwards; if the stone be of large size, lithotomy, though dangerous, is preferable, because in lithotrity the crushing must be repeated many times, and the fragments to pass the urethra are numerous; in some cases of enlarged prostate, lithotrity may not be proper, because there would be difficulty in taking hold of the stone, and the fragments afterwards would be apt to lodge behind the projection of the gland. When these two modes are duly considered, it will appear that lithotrity in the generality of cases is attended with much less risk, and bids fair very considerably to lessen the dangers to which patients suffering from calculus are exposed.

REVIEWS.

Scrofula; its Nature, its Causes, its Prevalence, and the Principles of Treatment. By Benjamin Phillips, F.R.S., Assistant-Surgeon to the Westminster Hospital. London: H. Bailliere, 1846.

If, upon a first announcement of the appearance of a new work on scrofula, a feeling should exist that nothing of value could possibly be added to our already extensively accumulated treatises and monographs, English and foreign, on this disease, it would quickly vanish on a careful perusal of this work by Mr. Phillips—not that any new theory is propounded—not that any ingenious novelty as to the physical or chemical nature of scrofula is advanced, nor any self-confident mode of treatment put forward. The merit of the book consists rather in the clear and able manner in which a most laborious and patient inquiry is conducted into the value of the prevailing doctrines regarding the causes and influences producing scrofula. To test the worth of the many and contradictory opinions, both as regards the nature and essence as well as the treatment of the disease, and to determine how much weight and authority is due to the dicta of some deservedly respected names, are the comprehensive objects of this work; and by an accumulation of facts, based upon reports and observations, both domestic and foreign, which for their extent and importance have been rarely surpassed, the whole subject is sifted and analysed.

For logical management and well defined terms the work will stand in broad contrast with much of the medical literature of the day; and certainly few works of our own times afford such evidence of ample and zealous endeavours to collect from various sources materials for the illustration of the subject; collected, however, not to establish any favourite doctrine, but simply to test the value, prove the reality, or contradict the commonly received doctrines as to the origin and prevalence of scrofula. It is not alone from the metropolis—it is not only from the wider extended population of the manufacturing districts, nor from a few town and country districts, that the statistical truths of this work are obtained. National schools and parochial establishments, charitable institutions, hospitals and infirmaries, metropolitan and provincial, families from mining and factory districts, town and agricultural, prison inmates and army recruits, furnish their quota of important facts. The influence of various climates is examined, and the effects of diet; whether the natives of cold and arctic—of temperate and humid—of torrid and Asiatic countries, suffer proportionally or disproportionally with each other; and reports from Russia, Prussia, Austria, Bavaria, Portugal, France, Belgium, Switzerland, Holland, America, Ceylon, India, &c., add materially to the value of the author's other researches.

The plan adopted by the author to obtain the most precise and accurate information, from which satisfactory and dependable conclusions might be deduced, was well calculated to ensure accuracy of observation among those whose aid was sought in this important and extensive task.

The following form, forwarded to those whose assistance was desired, will explain the manner in which the data bearing upon one branch of the subject was obtained:—

BOYS.

1.	2.	3.	4.
No. of children examined between six and sixteen years.	No. of such children who have decidedly fair hair, light blue or light grey eyes, and a fair soft skin.	No. of children exhibiting any of the following marks of scrofula:—Enlarged cervical glands, discoverable by the touch; sinuses or ulcers, succeeding to such glands; scrofulous bones or joints, or the consequences of them.	No. exhibiting the evidences of scrofula, described in the third column, and possessing the characters described in the second column.
GIRLS.			
DIET.			

It is evident that the results of a comparison between the returns to No. 2 column and those of No. 4, would settle one of the most popular questions with regard to the prevalence of scrofula among fair-haired and blue-eyed children, and the conclusion obtained is that such children are not exclusively predisposed to scrofula.

After devoting a page or two to the signification and derivation of the term scrofula, and in a very condensed manner bringing together the ideas and opinions of the ancients, from Hippocrates and Galen down even to some writers of the present century, the author proceeds to develop his own ideas of the nature of scrofula. For the purposes of any work, particularly one of an analytic character, it is most essential that clear and well-defined terms should be used. That each term should have a distinct and limited meaning, that there may be no error or confusion in any part of the inquiry when the same term is repeatedly employed.

Mr. Phillips then, in stating what are his own views of the nature of scrofula, says, he conceives it to be "a disease of the constitution, and that it is most clearly manifested by certain external signs, of which swelling of the subcutaneous lymphatic ganglia is the most conclusive." page 26. But a

tumid gland is not absolutely a proof of scrofula, for the superficial lymphatics in any region, even in the neck, may become tumid from certain local causes. But the presence of tumid glands, "in the absence of any obvious local irritation, is strong suspicion that the constitution was suffering under the taint of scrofula." "It would not, however, amount to more than suspicion" —" and unless the swelling of the gland be accompanied by the deposit of a product, hereafter to be described, known as scrofulous matter, the proof of a scrofulous constitution is in my judgment wanting."

Our experience has long convinced us that there is no peculiarity of feature, or distinctive characteristic of colour in the hair or eyes specially expressive of the scrofulous habit; but the opinion widely exists, that there are certain constant characters inseparably allied to the scrofulous diathesis. Mr. Phillips says, "I know of no certain sign by which the state of the constitution which precedes the deposit of scrofulous matter can be recognised." page 28. And again, "The result of my own observation of persons whose constitutions are tainted with scrofula, has satisfied me that there is the *utmost possible variety* in the external characters of those who present undoubted scrofulous taint. When the taint is made evident by scrofulous deposits, we find in one case the hair and complexion are dark, in another light; in one, the cheeks are rosy, in another pale; in one the alæ nasi are expanded, and the upper lip is tumid, in another both of these features present opposite characters." pp. 29, 30.

The most uniform qualities observed by our author as most commonly preceding the scrofulous development, are such as for the most part indicate an imperfect condition or power of the assimilative organs. "The abdomen is commonly tumid. The whole of the mucous surfaces are especially liable to derangement. discharges from the nose, the eyes, the ears, are common. The digestive mucous membrane affords early indication of suffering, the tongue has commonly a dirty whitish coating; the tonsils are usually enlarged; the stomach and bowels are frequently disordered, and digestion is ill-performed; acrid eructations are common; flatulence is often very troublesome; and the action of the bowels is very irregular. Similar phenomena are observed in the mucous tissue of the genito-urinary system: the bladder often shows an impatience of the presence of urine, and the desire to void it is often frequent."—p. 31. The exhalations from the skin are oftentimes fetid and sour, with a decided acid reaction. But while these symptoms are oftentimes present, and are distinctly expressive of mal assimilative processes, yet Mr. Phillips is decidedly of opinion that, "in a constitution favourable for the deposit of scrofulous matter, there are no features, in the absence of the tumour, so constant and conclusive as to justify a reliance upon them in pronouncing an opinion whether a constitution be scrofulous or not."—p. 32.

A chapter on the physical characters of the scrofulous deposits, with some microscopic details from observations made by Mr. Dalrymple and Mr. Gulliver, bring us to the chemical characters of this product. This is the only part of the work scanty in information or meagre in detail. In the chemistry of tubercle it is woefully behindhand. Doubtless not enough has yet been done in the analysis of morbid secretions and deposits for any useful or general law to be deduced therefrom; but much has already been achieved by the numerous organic analyses both of English and German chemists, to show that there is a considerable departure from the average constituents of healthy fluid, both in the secretions and excretions of scrofula, and that this departure from a normal standard is most palpable in the blood and urine. With regard, however, to the physical condition of the blood observed in scrofulous cases, ample material is gathered from various sources, and the result of the author's examination of the blood in sixty-seven cases of scrofula is, that although he "observed a considerable deviation from the condition of healthy blood, the changes have not presented sufficient uniformity to induce him to regard any particular condition as specially characteristic of scrofula; the changes are such as belong to a tolerably extensive group of affections, all, it is true, being connected with disordered nutrition and debility."—p. 57.

There are some important facts collected in reference to the question of the indentity of scrofula and tubercle—space does not permit us to enter upon this most interesting subject—we can do no more than recommend this chapter to the attentive and reflecting reader. It is a startling conclusion to arrive at, that consumption and scrofula are antagonising diseases. That the one is an exemption from the other. What are the opinions—the crude common-place opinions—even of the profession? But that a scrofulous childhood is the precursor of a phthisical maturity. Yet, what opinion does Mr. Phillips enunciate—deduced from an ample series of facts. "We find that in districts where the causes of phthisis act with most intensity, those of scrofula fall lightest; that the age when the ravages of scrofula are most keenly felt, is precisely that when the visitation of phthisis is least to be apprehended; that the sex which suffers most severely from one of those diseases is least affected by the other. And beyond all this, there is the fact, that among the numerous victims of phthisis, at least eighteen out of every twenty exhibit no marks of having suffered from scrofula."—p. 78.

Scrofula has been called the morbus Angliæ; yet a reference to the data of chapter seven will satisfactorily prove that the opinion, almost universal, that scrofula is pre-eminently an English disease, is unfounded, and that there is no country, so far as our present information extends, in which the people are more free from this disease than in England and Wales.

Among the alleged causes of scrofula, the question of hereditary transmission deserves attention. To determine how far the prevalence of the disease depends upon this cause—to confirm or allay the long-established suspicion that the disease descends from generation to generation, is no small benefit conferred on statistical medicine. Mr. Phillips' enquiries determine that an hereditary influence must, to limited extent, be admitted; but that the number of scrofulous children born of parents both of whom exhibited unequivocal marks of scrofula, was only four per cent. greater than those born to parents who were untainted. Thus,

	Families.	Children born.	Scrofulous children.	Propor. Pr.Ct.
Both parents untainted	506	2021	421	21
Both parents tainted	276	1092	271	25
Father alone tainted	589	2107	483	23
Mother alone tainted	652	2307	503	24

From this, it appears that the proportion of scrofulous children born of scrofulous parents is, at the maximum, but four per cent. greater than those born to untainted parents.

The question, Does a syphilitic taint in the parent tend to produce scrofula in the child? is carefully considered. Assuming that the struma of the ancients is the scrofula of the moderns, that syphilis was not known till the days of Columbus, it follows that whatever may be the cause of scrofula now, syphilis could not have been the cause anterior to the fifteenth century. This question is very critically examined, and deserves attentive perusal.

"Has the age of the parents any influence in the production of scrofula in children?" 'Eξ 'αγαθῶν 'αγαθὰ is a more ancient dictum than *Fortes curantur fortibus*; both are equally unfounded, and unsupported by evidence; and the popular notion that the offspring of early youth, as well as that of connubial dotage, are alike predisposed to scrofula, is not established upon enquiry. Their issue may be weak and less vigorous than others', but it does not appear that they are more obnoxious to scrofula than other weakly or delicate children.

Mr. Carmichael holds that intermarriages within certain limits of consanguinity, was a breach of the organic laws of the animal kingdom; and that the just and retributive penalty inflicted for the disobedience of those laws, was the generating a puny offspring, upon whom the curse of scrofula was stamped; and he states that among the privileged orders of society, and among crowned heads, scrofula is more prevalent from the frequency of their intermarriages. But it does not appear that these assertions are borne out by satisfactory evidence. Scrofula is not more prevalent among the aristocracy, or royal families, among Quakers, or Jews, or the inhabitants of the Channel Islands, whose marriages are contracted within narrow limits—often within the limits of blood relationship, than among those more numerous instances where marriage extends over a wider sphere (?)

The influence of the milk of a scrofulous nurse, and the probable effect of contagion, to produce scrofula are both shown to be inefficient.

It is a curious fact, well analysed by Mr. Phillips, that scrofula bears a singular relation to the general mortality of England and Wales: that is to say that in districts where the mortality is greater, scrofula, or the deaths from scrofula, are the least, and *vice versâ*. "There are places in England and Wales, where the general mortality scarcely exceeds one and a half per cent., whilst there are others where it amounts to three and a half per cent. on the gross population. In the former districts, the deaths from scrofula are 1 in 7000, a number nearly double that of the average of England and Wales; in the latter they only amount to 1 in 20,000." p. 151. Again, "A similar rule applies when we compare consumption and scrofula. Where the mortality is largest, that from consumption is also almost always largest, but that from scrofula is smallest. It is, therefore, almost a safe assertion to make, that whenever the general mortality, and that from consumption, are large, that from scrofula is small." p. 152. It would thus appear, that the causes tending more energetically to destroy life are incapable of generating scrofula; but that when operating or existing in a minor degree, they are capable of promoting the slow moving ravages of this disease.

Dietetic and atmospheric causes are next examined, and also the effects of temperature and avocation. Of these, the influence of food is manifestly the most important. Space does not permit us to follow Mr. Phillips through his elaborate analysis of the influence of nutritive agents in developing scrofula. Suffice it to say, that we entirely agree with him in viewing this agent as one of the most efficient, both in the production and prevention of scrofula.

Deprivation and deficiency of food, impure, and innutritious, even redundancy and excess, may severally become predisposing causes of scrofula; but with each certain other conditions co-operate. Thus, with deficiencies of food, insufficiency of clothing, and exposure to cold, are but too often associated. Redundancy and excess of food, pampered indulgence and over-feeding, disproportionate quantities of animal food, administered under the mistaken notion of strengthening a delicate child, but too often concur to overtax the assimilative powers, and thus become equally efficient with any of the former to beget the scrofulous diathesis. For whatever permanently disorders the functions of digestion in the early periods of life, directly tends to enfeeble the constitution; and an organism with an imbecile vis vitæ is proportionately predisposed to scrofula.

This portion of the subject deserves the closest attention; it is by far the most elaborate and important section in the book. The elements are carefully and impartially selected, and the conclusion, that diseased or imperfect nutrition is among the most efficient of all the causes inducing scrofula, fully and clearly established.

It is unnecessary to follow the author through that portion of his work devoted to treatment,— preventive or curative. It has been stated already that the object of the work is purely analytic. There is no vaunting forth of any special plan of the author's own devising. The merits of all known remedies are examined, to establish their respective claims to confidence. It is shown that no one remedy, *per se*, possesses any remarkable efficiency; that severally as alteratives or tonics they are capable of fulfilling one or other of these objects; that the treatment of individual cases must be left for the most part to the peculiarity of their several features; that when there is disordered digestion, means must be applied for the regulation of this function, and such remedies used as will best restore the vigour of the mucous surfaces; and that change of air and diet are the most effective agents when they can be commanded. The observations on the surgical treatment of the scrofulous are practical and judicious.

To the book-learned, the treatment by the royal touch, and other superstitious practices, may be curious; to the intelligent reason it can be but a painful record of the cant, hypocrisy, and craft by which such practices were encouraged—practised not so much for the benefit of the sufferer, as for the maintenance of a false influence miscalled holy, and the perpetuation of a power profanely styled divine.

The appendix contains many valuable statistical records—data upon which much of the reasoning of the work itself is based. We believe that this book will be found to be a valuable addition to the medical literature of the day. It contains much information, which, if not new in itself, is yet novel in its arrangement and disposal. As we have said, the chemistry of tubercle is the worst feature of the whole; indeed, it had been better omitted entirely. As a whole the work does much credit to the industry, sagacity, and practical judgment of Mr. Phillips, and we have much pleasure in giving it this impartial commendation.

The Chemistry of Poisons. By JOHN HORSLEY. London: Published by Silverlock.

This is a synopsis exhibiting a very concise but complete arrangement of the most deadly mineral and vegetable preparations, with their appropriate tests and qualitative analyses, with indications very accurately coloured. The sheet is elegantly got up, and may hang on the wall of the druggist or medical practitioner much to his convenience, and possibly much to the safety of the public.

TO CORRESPONDENTS.

R. R., Liverpool.—*Our correspondent is informed that it will prove a dangerous experiment for him to undertake the dispensing of prescriptions without a very competent knowledge of the language in which they are written; however, if he be determined to endanger the lives of his fellow creatures, we believe Spillan's "Medical Formulary and Key" to be a work which will help him out of many difficulties.*

M. L.—*The surgeons to county lunatic asylums are, as far as we know, appointed by the magistracy of the district.*

A Constant Reader, Ampthill, *has sent us the following note:—"The soi-disant Dr. Ellis, who has recently taken his trial for manslaughter, a few years ago was a hatter in this town. He became a flaming teetotaller, which, naturally enough, led to hydropathy, which, in its turn, very naturally resulted in manslaughter. He was a good hatter, and a zealous advocate of teetotalism, but is no better adapted to treat disease than a gypsey-tinker to repair a watch."*

Chirurgus.—*We imagine Bovini to be the genitive case of a coined adjective* Bovinus. *It seems to be a specimen of doctors' dog Latin.*

The examinations for the degree of M.D. at the University of Aberdeen *will commence on the* 28th of July, instead of the 22nd, *as was incorrectly stated by advertisement in the* Medical Times *of June 20th.*

Mr. Henry Smith, *House-Surgeon to King's College Hospital, has favoured us with another case of fracture of the humerus produced by muscular action. The following are the particulars.—"A young man, aged twenty-eight, came to the hospital on the 27th of June, 1846, with injury of his right arm. On examination, fracture of the shaft of the humerus, near the insertion of the deltoid muscle, was discovered. On questioning the man as to the cause of the accident, he gave me the following account.—'I was endeavouring to climb over a garden wall, and laid hold of the top of the wall by both hands to raise myself, having previously put my toe in a chink in the wall. On trying to raise myself, my right arm fell back from the wall, and I found it was broken. I was using more force with the right than with the left arm.' On inquiring into his health, I find that he has suffered two years from severe rheumatic pains, and he is now suffering from pains in the right arm, which appear to be rheumatic, as he complains of pain in other limbs, and has done so for the last three weeks. In other respects he is healthy."*

F. R. S. *is perhaps right in attributing the attacks on Dr. Roget to no more respectable source than the low jealousy of a vulgar and unprincipled rival, and in expatiating on the fact as a proof of low press prostitution; but we see no use in giving importance to assaults that have provoked as little notice as respect.*

We have received eleven numbers of the "Liverpool Health of Towns' Advocate," and cannot approve too highly of the aim, character, and merits of the publication.

Mr. Teetgen *has sent us one of his diamond-edge razors and new strops. They may be quite as good as they look, but they are not subjects on which we can give a professional opinion.*

P. D.—*The notice is too long for our use.*

Mendoza's *question should be addressed with a fee to a medical practitioner.*

Amicus.—*We never mention the names of contributors unless sure of using their papers.*

W. H. B.—*We cannot give the information asked.*

Omega *is witty on the cures certified, but we have no wish unnecessarily to re-enter on the subject.*

A Student *is eligible to the examination of the College of Surgeons of England. He is not to those of the Irish College of Surgeons, or of the Apothecaries Societies of either Ireland or England.*

A Guernseyman.—*The president of the Provincial Medical and Surgical Association for the coming meeting is Mr. Green Crosse, the distinguished surgeon of Norwich.*

A Subscriber.—*Dr. R. Bennet, Finsbury-place, is the secretary.*

M. R. C. S.—*Candidates for the diploma of M.D. from the University of Heidleberg must present certificates of attendance on lectures on physics, botany, chemistry, anatomy and physiology, pathology and therapeutics, materia medica, surgery, and midwifery, and of having attended medical and surgical hospital practice. The examination is conducted* vivâ voce, *and by written questions, in German, Latin, English, or French, and comprises anatomy and physiology, materia medica, chemistry, pathology, therapeutics, surgery, and midwifery. The candidates must also translate an aphorism of Hippocrates into Latin. Fee for diploma, &c., £23.*

A Druggist.—*If a general practitioner, chemist and druggist, or other person, sell patent or proprietary medicines without having a licence, he is liable to a fine of £20; if there be not also a stamp so affixed to the article that it cannot readily be removed, he will forfeit £10. The licence costs £2, if the medicines are sold within the cities of London and Westminster, the borough of Southwark, and the limits of the twopenny post; twenty shillings in any other city, ten in a borough, and five for towns and villages. Soda, seidlitz, and ginger-beer powders, are not included among the patent medicines.*

M. R.—*We regret our inability to comply with our correspondent's wishes.*

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THE MEDICAL TIMES.

SATURDAY JULY 4, 1846.

Quam multa injusta ac prava fiunt moribus!—TERENCE.

Quorum animus meminisse horret luctuque refugit.—VIRGIL.

It has often occurred to us, amongst other mental operations to which we are subject, to ponder upon the degraded state of the medical profession, and wonder what first caused it. To trace consequences to their occasions, is an intellectual enterprise we are particularly fond of; and, without vanity, are inclined to think that we are not altogether unskilled in it. But of all tasks in this department, to which we have ever committed ourselves, the one just mentioned has most puzzled us, and we have not failed through lack either of energy or perseverance. True, we have sometimes dozed over it, and dreamt about it—and yet, with the mind free and frolicksome, and gay in its liberties, as in its dreaming moods ours seldom forgets to be, we have done nothing towards settling this troublesome question. Still oftener have we treated it in wakeful earnest, and after the true fashion of severe reasoning—but all to no purpose. Early and late have we toiled at it, heedless of what the effort cost us, and yet, just as we hoped to be attaining the summit of the difficulty, Sisyphus-like, we have had the stone rolled back upon our labours, and have endured the mortification of seeing that we were only just commencing them. We have appealed to history, and it kept a discreet silence. We have inquired of our personal experience, but it had nothing to say. And thus, after some years of trouble, we are just as near solving the problem, as though we had never considered it at all.

It must not be understood that we are speaking of that degradation and disgrace which are owing to faults and follies of our own. Those are too palpable to puzzle anybody. A bad system of government in general, and bad actions in particular, are enough to ruin any cause—and they have well-nigh ruined ours. To correct grievances such as these, is an unceasing object with us, as the leader-columns of the MEDICAL TIMES can weekly testify—but these are not the things we allude to at this moment. The grievances we complain of are those which do not originate with ourselves—for which we are in no wise responsible—and yet, over which we have no control.

We allude to the public position to which the most distinguished members of the Medical Profession in this country are restricted. We complain of our own men not having open to them the same opportunities in the great contest for emolument and fame which belong to other professions. Instead of being permitted the advantages which these possess—advantages which we would gladly have restricted to merit and usefulness, and to such only—we have no temptation held out to us that is worth for a moment the consideration of a noble mind. Is this honourable—is it commonly honest? Let us see how the inequalities we complain of compare.

A poor lad, homeless, and friendless, and in orphanage, seeks an asylum in the army. It will protect him whilst he lives, and provide a grave for him when he dies—and he makes no bad exchange for his destitution. In peaceful service he conducts himself as becomes a soldier, and obtains by good manners and good luck, an

elevation from the ranks. A war breaks out, and he is one of those destined to serve in it: desperate difficulties lie before him, but he has courage enough for their encounter. If he fall, he leaves a name covered with glory, and realises one of the objects of a warrior's ambition; if he conquer, promotion, honour, wealth, and title, are his—and what earthly recompense can he desire more!

A rich man has a lout of a lad, upon whose head the kindly services of education have been adventured, but vainly; and he lies a dead weight upon his father's purse and protection. The lad, however, has a certain brute courage about him, which, added to a love of gaudy dress, suggests the notion of making him a soldier. A commission is purchased forthwith, and by mere pecuniary favour, he is thrust into a position in society such as he would never have attained with his brains, had he cudgelled them till doomsday. This lad never smells powder, except upon practice days; leads a life of sheer idleness, unless a devotion to Venus and Bacchus may be considered the converse; but after having crawled for a certain number of years between heaven and earth, with his name on the promotion list, his turn comes, and with the aid of a little more money, he secures a title to *honour* and good pay for the rest of his days!

The facilities, then, of glory and of gain, offered in the army, are not trifling: moreover they are twofold. A beggar may better himself there, and, if well-behaved, may chance to get renown, and a goodly recompense. A man with a little ready money may purchase a station, and with it a character, and receive a capital, and constant per centage upon his outlay into the bargain! What a contrast does this furnish to the lofty, liberal, benevolent, hazardous, profession of medicine! Who ever heard of a pauper joining our ranks, and rising from them to wealth and title? And what are we less than soldiers, that we should not fare as well! Is less perseverance, is less toil, is less personal sacrifice, is less qualification, wanted to prepare one man to cure wounds, than to prepare another to cause them? Is less discipline required to qualify one man for healing diseases, than to fit another for shouldering a gun and discharging it? Is there less courage in going deliberately, and with a full consciousness of its danger, into an atmosphere of plague, pestilence, and the poison of fever, than in galloping furiously, amid the encouragement of comrades and martial music, on to the ranks of a tyrant foe? Here, the banners of chivalry are flaunting in the busy breeze, the fife and drum, and the "pride, pomp, and circumstance of glorious war," are incentives irresistible to valorous action; and coward must be the heart that cannot beat boldly in its midst—there, in that sickly room, with its lurid light, and its dark banner of death, lies the victim of contagious disease, and there is his physician, with no glory around him, no cheering voices of encouragement, no illustrious promises of gain or greatness—exposed to danger as dreadful as the battle field, trying the last sources of his art to save a fellow creature—which is the worthier, the more courageous, of the two? We are lovers of valour, of whatever sort, and wherever we find it; but we affirm that, from our midst, have been displayed examples of moral and physical courage, equal to anything, and superior to most, that the history of war can furnish. With every deference to the "hero of a hundred fights," we challenge his lifetime to parallel in cool, calculating, deliberate bravery, the heroism of Sidney Bernard! It is a great thing to be able to fight, no doubt of it; but the magnitude of the affair is considerably lessened when a man is in a position which does not allow him to choose for himself. "Do, or die," is the necessary motto of those who have no choice between killing and being killed. We have heard of a man taking up a bomb, with its fusee lighted, that had fallen near him, and coolly throwing it out of the window. But instead of regarding this as a proof of courage, we should merely consider it an instance of great presence of mind, and of anxious desire to avoid danger. If the shell had remained untouched, the man would have lost his life by its explosion; and to attempt to throw it out of the window, was running no greater risk than letting it alone; at the same time that it gave him a chance of escape. We have heard of a man "leading the forlorn hope," and exposing himself to almost certain death; but this was because inaction would have been sure to sacrifice him. No doubt there was much courage in the act, but it was one which could not be avoided but with the assurance of positive destruction. We have heard of men galloping heedlessly up to a cannon's mouth, or single-handed into the ranks of the enemy, as wild and ungovernable as the horses that carried them—but feats like these we call foolhardiness, not bravery. Of such things, however, is the courage of the battle-field made up, and the perpetrators thereof are crowned with glory and reward!

How differently is heroism requited, when the hero is one of us. Take in illustration the fate of poor Bernard. Within a quarantine distance of the place where he lived, came a vessel from the East—a contagious fever raged amongst the crew, already thinned by its scourge; the medical officers were dead; no help was amongst the survivors; they were being hourly sacrificed, and there was none to save them. In the face of such probable death, premium was unavailing, and every soul on board might have died, and the vessel foundered, but for the heroic conduct of a young surgeon, who, forgetting his own life in a noble desire to save the lives of others, volunteered his assistance to the despairing crew of this ill-fated ship. He cheerfully, and "without fee or reward," ventured upon his deadly mission—he braved the pestilence that was fast hurrying away its victims, and arrested its ravages in as far as he was able—he did all that human aid could do—he was permitted the glorious reward of seeing his fellow-creatures saved by his service—but, in the midst of this gratification, himself became a sufferer of the very scourge he endeavoured to stay—and when the vessel neared the shores of England, the heroic Sidney Bernard was amongst the number of its dead!

This was true courage—this was heroism worthy of the name. There was no artificial valour here—no transcendent temptings to great achievement—no certainty that, falling, he fell Roman-like, covered with glory—that living, he was to bear a name prodigal in its honours, and be rewarded from the treasury of a grateful country! It was a deed, the offspring of a sense of moral, manly, duty—the more daring, because it could have been avoided—the more bounteous, because it was adventured without a hope of recompense! The hero died, and the waves received his body—the final sacrifice his noble nature made for the interests of his fellow-creatures. And what has been the issue of this illustrious devotion? Not a farthing from our prodigal public funds has found its way into the pockets of his destitute family; and not a stone in any corner of our land is erected to mark the noble, disinterested, self-sacrifice, the martyr made! "Oh! shame, where is thy blush!" A man who kills his foes is honoured with effigies without number—a man who dies to save the lives of his countrymen is permitted to rot unregarded! The worst of the story is, that the case of Sidney Bernard is not uncommon. We have not done with the subject.

ESTABLISHMENT OF THE NATIONAL INSTITUTE.

It is with unfeigned gratification that we announce conclusively and definitely that there is to be a National Institute of the Medical Profession of Great Britain and Ireland. The materials have abundantly presented themselves, and there is no obstacle to its being established forthwith. The appeal made to the public spirit of our medical brethren has thus been worthily responded to, and the great scheme of incorporating the whole profession now takes that substantial shape which puts to shame the prudent forebodings of men who talked about a "chimera." The first step—the great difficulty—thus surmounted, we already enjoy in the active triumph of a successful commencement, the anticipatory triumph of a successful result.

We claim excuse if we record this state of things with a satisfaction quite personal. The only organisation at once great, respectable, and successful, we were the journal that foreshadowed and enforced it—that hailed its adoption by the Committee, and incessantly commended it to that of the Profession. Of the whole medical press we alone stood to it; all else discountenanced or opposed it; but thus fortunate in friends, it may be, as in opponents, the plan, vast as it is, *has succeeded.* The triumph is as much to our personal satisfaction as it is to the disgrace of those who have vainly struggled to avert it. Often as we have reverted to this project, we have yet not done justice to the extent of our anxiety for its complete success. It is to us the compendium of Medical Reform. All we complain of finds here its remedy; all we ask finds here its *desideratum*; and our thorough conviction is, that great as are its aims, they are as practical and attainable as they are vast. It is no day dream of impossible excellence. Everything is present; nothing more is required than the will in ourselves to do. There is a perfect adaptation between means and ends. It reminds us of some modern pieces of machinery, by which the most gorgeous results arise from movements the most simple and powers the most ordinary. There is genius in the whole framework. The simplest contrivances evolve the greatest changes; a self-ruling society produces an organised profession. Whence, then, can come failure? Solely from a cause it has been our absorbing desire to remove,—our unconsciousness of the boon within reach, or our indifference to its immediate acceptance. The machinery is perfect; but to set it in action the volition of the profession is required. The motor power is in us. That unexercised, the opportunity is unclutched. The thing is wholly in our hands; we can accomplish it, without difficulty, too, if we please; if we fail, we can no longer murmur save at ourselves. It is at junctures like this when men may especially be known by their fruits. If we achieve not the very little demanded from us, we deserve even a worse fate than that now surrounding us. But as

we have said, each day offers fresh evidence that our efficient co-operation will not be wanting; let us give it then, and enlist that of others, as if we felt it could not be too extensive.

We consider the accession to the new Ministry of Mr. Hawes, the parliamentary organ of the National Association, as a fact of no mean significancy at the present moment. We look upon him as pledged to the foundation of the new Institute by a tie which brings to us with it, the full aid of Government. An united profession—with an organised head—backed by Government, and having for its parliamentary exponent a minister who has deeply studied the subject, what have we before us but the brightest prospects? The corporations, especially that of the College of Surgeons, were never in a position of less influence or respectability than now. Public opinion is distinctly against them. For our parts we were never more united, never more determined; and even in the quiet and forbearance of our present attitude is there better evidence of the depth of our sense of right and of our resolve for its maintenance. Never than now was there less cause for hopelessness; never more of buoyancy, expectation, and exertion.

One duty not alien to the forethought which becomes an important cause, is a thought on the approaching dissolution. There can be little doubt that before Christmas we shall have a general election. Can we not, by some preparation, arrange for the return of one member or more conversant with our wants, and capable of lending efficient help to any measure proposed for their remedy? There are few constituencies in which medical practitioners are not found with considerable political influence; can they not exercise it in the suggestion of candidates likely to bring to our cause some knowledge, sympathy, and exertion? At all events, we can take care to see that candidates are not biassed against our views on Medical Reform, secure that they shall pledge themselves upon the subject to a full consideration; and thus predispose them to a support of our claims when they are under the consideration of Parliament. "Members" are very much like other people—apt to forget that there are such persons as doctors, except when too ill to be agreeable to anybody else. The administration of a little early pressure would have a very salutary effect on the state of their memories.

THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The Bath and Bristol Branch of this large Association recently held its annual meeting in Bath. Dr. Budd proposed the following resolutions, which, except the third, were carried unanimously:—

"1st. That so large a sum as that annually subscribed by the members, amounting now to about £2000, might, if more expressly applied than at present to the encouragement of medical science in common with the other objects of the Association, be made to lead to results of such value and importance in the shape of original investigations and researches as would confer lustre upon the Association as a public body, and do honour to the provincial members of the profession generally.

"2nd. That, by the present administration of the funds, which are now almost wholly absorbed by the weekly journal, and annual volume of Transactions, these results are very imperfectly obtained, and that the two publications just named form a very inadequate return for the large sum of money expended upon them.

"3rd. For the sake of economy, therefore, but more especially with the view of forming a reserve fund, for the promotion of the objects expressly named in the first resolution, this meeting would suggest, and begs earnestly to recommend, that the journal be published in future but once a fortnight, or once a month; that the annual list of members and retrospective addresses, if continued, be printed in the journal, and that the volume of Transactions be altogether given up, or, if continued, be devoted exclusively to the publication of important original researches, and be published from time to time, at such intervals as the accumulation of matter requires.

"4th. That the reserved fund be bestowed in grants for the encouragement of original investigations, or in rewards for essays on medical subjects, in such manner and in such sums as the Council may think fit."

*** We have long felt that an Association devoted to public interests should not, for the sake of its own efficiency, be embarrassed with a mercantile competition with the newspaper press. If *media* of publicity were wanting, there might be some grounds for the exceptionable course; but at present no complaint can be made in that direction. The unanimity of this important annual meeting leads to a confident hope that the funds will in future be applied in a way more adapted to educe important public results.

HARVEIAN ORATION.

The Annual Harveian Oration was delivered at the Royal College of Physicians on Saturday last, the orator on the occasion being John Elliotson, M.D., F.R.S. Many distinguished persons were present, the meeting was fully attended by the fellows and licentiates of the College, and on concluding his oration, Dr. Elliotson was greeted by a unanimous burst of applause. The discourse was delivered in Latin, as is usual, and we noticed that its composition possessed all the depth of research and refinement of expression which the extended scientific and literary fame of the orator led us to hope for.

We are happy to be enabled to give our readers a brief abstract of the English version of this oration; to publish it more in detail would be illiberal towards its author, who proposes to lay it before the profession in its original form.

After reading the passage from Harvey's deed, which establishes the annual oration, and giving a brief explanation of its meaning, Dr. Elliotson proceeded to eulogise Linacre, the founder of the College of Physicians. He alluded especially to his having learnt Greek at Florence under Demetrius Chalcondylas, an Athenian, and to the opposition he received on returning to England, by reason that the Grecian tongue was not then taught at Oxford. He alluded also to Rabelais, who was hated and abused by his French brethren on account of his extraordinary merits, "particularly because he studied Greek, the novelty of that language making them esteem it not only barbarous, but anti-Christian." The orator mentioned the foundation of the College of Physicians by Henry VIII, through the influence of Linacre, and laid great stress on the advantages the public had derived from the institution. The orator next commented on Caius, who flourished fifty years later than Linacre, and alluded to the differences between physicians and surgeons during his time. He thought there was "some ground for limiting the prescriptions of the surgeons as far as possible, because, no doubt, they prescribed for all the patients they could obtain, medical as well as surgical, not being high-minded, nor even conscientious; for they were very ignorant of medicine, having neither received medical education, nor passed medical examination." He spoke of the late period at which the College of Surgeons had required proofs of medical education from the candidates for their diploma, and on this subject made some just remarks, mentioning a saying of Sir Astley Cooper's, "Thank God, I know nothing of medicine," although he prescribed openly for thousands of medical cases annually.

Caius, he said, was remarkable for his munificence. He endowed, during his lifetime, a college at Cambridge with estates for the maintenance of three fellows and twenty scholars, two of the former being physicians, and three of the latter medical students. He also erected a statue to Linacre in St Paul's. The orator next adverted to "Caldwell, a fellow of Brazen-nose College, and a very able president before the death of Caius, who endowed, in conjunction with Lord Lumley, an anatomical and surgical lecture, which, though the facilities of publishing and the habit of reading periodicals have now rendered lectures within these walls of little importance, was, in former days, eminently useful, and has acquired a perpetual celebrity by being the occasion of the announcement of the circulation of the blood."

He then spoke of the immortal discoverer of the circulation of the blood, adverted to his education and early professional life, taking an opportunity of alluding to the unfair power of family interest in procuring hospital appointments in England. He mentioned Harvey's extended education, and alluded to his mode of announcing the discovery which has rendered his fame immortal.

The orator gave an elaborate review of the steps by which Harvey was led to his great discovery, and of the labours of anatomists and physiologists before his time, and particularly mentioned Servetus, (burnt to death in the slowest possible manner by Calvin because they differed upon a supernatural point) who had taught, a little before Vesalius published and some time subsequently, that the right and left sides of the heart communicate, not by apertures in their partition, as Galen had said, but by means of the pulmonary vessels.

The orator next entered into an eloquent exposition of the absurd "*fancies*" which the medical men of Harvey's day brought forward to refute the discoverer's "facts." "The medical world," he said, "hugging their errors of education, and satisfied of these errors being natural truths, were perfectly blind to his facts and necessary inferences—had eyes and saw not—and many would not go and see, asserting that if they did see they would not believe. Harvey's facts could not be facts, because their fancies were facts. The authorities of the profession—the leading physicians and surgeons, the professors in the various universities of Europe, lecturers and authors of all degrees, pronounced his statements to be preposterous, and, had editors of quarterly, monthly, and weekly periodicals then existed, they would have been the noisiest and bitterest of all." He noticed the falling-off in Harvey's practice in consequence of his discovery, and quoted the following portion of a letter from Harvey to Riolanus, showing the spirit in which the former met his abusive critics. "To return abusse with abuse, I consider unworthy of a philosopher and of an inquirer into truth; and it seems to me better and more prudent to dissipate such evidences of bad feelings by the light of true and satisfactory observation. Dogs must bark and vomit forth what is in them, and cynics will be found among philosophers; but we must prevent them from biting or infecting with their maddening venom, or gnawing the bones and foundations of truth. I resolved never to read, much more never to condescend to answer, detractors, idle carpers, and writers tainted with scurrility, from whom nothing solid, nothing but abuse, could be expected. Let them indulge their depraved desires; I cannot think they will find many respectable readers; nor does the Almighty bestow upon the bad the most excellent and highly to be desired gift of wisdom. Let them continue to revile till, if they are not ashamed, they at least are sick and tired."

The orator then noticed that, like the other greatest British names in our profession, Glisson, Sydenham, Jenner, John and William Hunter, Harvey died unhonoured by title. He was elected President of the College of Physicians, however, at the age of seventy-six; but he declined the honour.

Dr. Elliotson next alluded to Gilbert, who, though neglected, was one of the highest glories of the college. He produced a work full of discovery and general views, and containing almost all that is now known of magnetism, independently of electricity, and much that has been published by "posterior

inquirers of high reputation, and received by the world as notable discoveries."

The orator then, after noticing more recent benefactors to the College, among whom were Wollaston and Thomas Young, adverted to the contumely and disbelief with which new discoveries connected with our science had been in all ages received. He instanced Aselli's discovery of the lacteals; Alpini's demonstration of the sexual system of plants; Ambrose Paré's treatment of gun-shot wounds; the prohibition of antimony by the Faculty of Medicine at Paris; the fierce opposition to the introduction of Peruvian bark, Cromwell being allowed by his physicians to die of ague rather than to have recourse to it; the inoculation of small-pox, which was declared to be an abomination, and the offspring of Atheism; the violent opposition to vaccination, to auscultation, and to the physiology of the brain, as discovered by Gall; as well as the opposition to the introduction of prussic acid into our materia medica.

The orator concluded his eloquent speech by alluding to his favourite science—mesmerism—in the following words:—"Never was it more necessary than at the present moment to bear all these things in mind. A body of facts is presented to us not only wonderful in physiology and pathology, but of the very highest importance in the prevention of suffering under the hands of the surgeon, and in the cure of disease. The chief phenomena are indisputable; authors of all periods record them, and we all ourselves witness them, some rarely, some every day. The point to be determined is whether they may be produced artificially, and subjected to our control, and it can be determined by experience only. The loss of common feeling, anæsthesia, is but a form of palsy, and in it wounds give no pain. If this condition can be induced temporarily by art, we, of necessity, enable persons to undergo surgical operations without suffering. Whether the artificial production of those phenomena, or the performance of the processes which so often induce them, will mitigate or cure disease, can likewise be determined by experience only. It is the imperative, the solemn, duty of the profession, anxiously and dispassionately to determine these points by experiment, each man for himself. I have done so for ten years, and fearlessly declare that the phenomena, the prevention of pain under surgical operations, the production of repose and comfort in diseases, and the cure of many even after the failure of all ordinary means, are true. In the name, therefore, of the love of truth—in the name of the dignity of the profession—in the name of the good of all mankind—I implore you carefully to investigate this important subject."

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Meeting of June 23rd, 1846.

WILLIAM F. CHAMBERS, K.G.H., M.D., F.R.S., President, in the Chair.

A Case in which a large Tumour was developed in the Substance of the Fifth Nerve and its Ganglion. By JAMES DIXON, Surgeon to the Royal London Ophthalmic Hospital.

A woman came under my care, in October, 1844, for dimness of sight in the left eye. The fifth nerve on the same side had totally lost both its sensitive and motory function for a period of six months. Towards the middle of December inflammation of the eye came on; lymph was effused into the anterior chamber, and the pupil became closed. At a later period, the external rectus and levator palpebræ, as well as the muscles supplied by the facial nerve, were paralysed; and on the 8th of February, 1846, the patient died.

The various symptoms observed during life[1] were satisfactorily explained by the post-mortem examination. The temporal muscle on the right side was of natural appearance, whilst the left one was so wasted as hardly to be recognised. Everything was healthy in the brain and nerves on the right side. To the left of the pons varolii was an oval mass, slightly attached to the encephalon at the junction of the pons and crus cerebelli, and extending forwards, beneath the dura mater, as far as the foramen lacerum orbitale. This tumour, from which the three divisions of the fifth nerve emerged, had hollowed out for itself an irregular pit in the concavity of the great wing of the sphenoid bone. The glosso-pharyngeal, vagus, spinal-accessory, and lingual nerves were unaltered.

The morbid growth proved to be a degeneration of the trunk of the fifth nerve and Casserian ganglion. A section showed a reddish, soft, but not pulpy, mass, with here and there parts of firmer consistence and of a yellowish colour. Not a trace of nerve-tubes or ganglionic corpuscles could be found in it.

Nothing abnormal was noticed in the ophthalmic ganglion of the ciliary nerves. The eyeball was as large as the right one; the sclerotic was of natural thickness; the choroid of a reddish-brown, with no trace of black pigment, except a little about the ciliary processes. The vitreous humour was perfectly clear and colourless; the iris adhered to the middle of the lens, which was of a pale yellow, and opaque at the centre. The cornea showed traces of its former opacity.

The author adverts to another case of inflammation of the eye similar to the foregoing, with entire loss of function of the fifth nerve on the right side dependent on the development of a hard nodule of yellowish matter, about the size of a large pea, in the substance of the fifth nerve, close to its origin from the pons. On the left side a similar nodule was developed in the third nerve; and this had totally destroyed the function of the optic nerve, by compressing it just behind the commissure.

No difference could be observed between the deeper textures of the two eyes. The lower third of the right cornea presented a dense white cicatrix, to which the edge of the contracted pupil adhered.

[1] Transactions of Med. Chir. Soc., vol. xxviii, page 389.

Account of a Case in which an Operation was performed for Hypertrophied Scrotum and Penis. By F. H. BRETT, F.R.C.S., Surgeon to the Western Ophthalmic Institution, late Surgeon to the Governor General of India's Body Guard, and to the Eye Infirmary, Bengal.

The patient was a man aged forty, and the disease originated about four years ago in stricture and extravasation of urine. The skin was warty, with fissures and ulcers leading to short sinuses. He had phymosis to such an extent that the prepuce appeared like a second glans penis. One hour previous to the operation seventy drops of laudanum were administered. The operation of excising the diseased parts was performed, March 14th, and occupied about ten minutes, and a quart of blood may be estimated as the quantity lost. Four small arteries required ligatures. The case proceeded favourably, and on the 16th the sutures were removed. The wounded surfaces were all united, excepting at the posterior inferior part of the scrotum. On the 11th of April the patient was able to return to his home in the country.

The author states that there can be no doubt of the identity of the pathology of this case with those on which he has repeatedly operated with success in India, only the malady in this instance had its starting point from a *fistula in perineo*, whereas in most cases it originates in a local inflammation of a peculiar kind. This view is confirmed by the investigation of Mr. Quekett, who examined the tumour. It weighed nine pounds twelve ounces, presented a dull white colour, and in some parts was hard and difficult to cut, whilst in others it was soft, and moistened by a fluid containing numerous globules of oil. Examined by the microscope, it was found to consist almost entirely of the white and yellow elements of areolar tissue, mixed up with a few nucleated cells. There were also numerous fat cells in small masses throughout the whole of the tumour.

The author remarks that, in almost, if not in every instance, the genital organs have been removed with the disease, whereas in this, as in all his cases, they were preserved. He concludes by briefly noticing objections which were raised to the operation.

Particulars of a Case in which enormous Enlargement of the Spleen and Liver, together with Dilatation of all the Blood-vessels of the Body, was found coincident with a peculiarly altered condition of the Blood. By HENRY W. FULLER, M.B. and L.M. Cantab.

The author relates the particulars of one of those cases of enlarged and indurated spleen so frequently met with in malarious districts, and more rarely in parts of the country apparently exempt from malarious influence. The case was that of a man, an inhabitant of Chelsea, who was admitted into St. George's Hospital on the 31st of December, 1845, under the care of Dr. Nairne. The disease, which, according to the patient's account, commenced about eight months prior to his admission into the hospital, was for some time characterised only by languor and depression, with many symptoms indicative of dyspepsia. In the course of about six weeks, however, his attention was drawn to a small, hard, yet by no means painful, tumour in the left hypochondriac region, which, after remaining nearly stationary in size about three months, began to increase very rapidly, while the symptoms of dyspepsia were greatly aggravated; the languor and depression became extreme; he lost his appetite; his bowels became habitually costive; and he suffered from headache and vertigo, nausea, and occasional vomiting. No medical treatment was had recourse to, and the tumour continued to increase in size. Epistaxis ensued, and constantly recurred, and about the middle of Dec. diarrhœa supervened in addition to his other symptoms. He became slightly jaundiced, and, after lingering on for some little time, getting daily weaker and weaker, expired on the 8th of January, 1846.

Post mortem examination revealed, as was expected, an enormously enlarged and indurated spleen, and very great enlargement of the liver. But further investigation proved, that all the blood-vessels of the body were much dilated, and the blood itself was grumous and of a peculiarly grey colour. During life the author had three times examined the blood under the microscope, and after death he proceeded again to its examination, and in every instance with the same result. On each occasion he found, in addition to the natural blood corpuscles, a very large proportion of abnormal granular colourless globules, which he proceeds more particularly to describe; and then, having detailed the particulars of the case, with the remarkable alteration in the blood, he proceeds to inquire into the nature of the disease, its connection with malarious influence, the cause and nature of the local enlargements, the mode of generation of these abnormal globules, and the possibility in such a case of effecting a cure; and, after adducing reasons for his several conclusions, propounds it as his opinion, that the disease essentially consists in some peculiar perversion of the nutritive functions, induced by exposure to malaria, or some such analogous influence, and that, "instead of viewing the enlargement of the spleen as the principal object for investigation, it will be consistent with a correct view of the disease, to speak of the enlargement of the spleen as one of the phenomena usually attendant on a peculiar form of constitutional disorder." He does not refer the local enlargements to inflammatory action, or to obstruction to the circulation caused by the presence of these granular globules, but looks upon them, together with the dilatation of the blood-vessels, the altered condition of the blood itself, and the other organic lesions, as simple evidences of perverted nutrition, in themselves the effects of one and the same cause. He illustrates this case, and supports some of his positions, by reference to another, and, as he believes, a similar case, which fell under his observation in St. George's Hospital in the early part of the year 1842. The history and particulars of this case he briefly details, and then concludes, in reference to the possibility of effecting a cure in this form or modification of disease, that if careful and appropriate treat

ment be in the first instance adopted, a favourable issue may not unreasonably be expected; but that if the first stage be neglected, and the formative functions are so far perverted as to have given rise to the generation of these abnormal globules in the blood before the patient is properly attended to, the case must be from its nature hopeless.

A Case of Cystic Disease or Cystic Sarcoma of the Testis. By JOHN ADAMS, Esq., Assistant-Surgeon to the London Hospital.

The author states that a recent examination of a specimen of this disease having led him to a conclusion as to its nature at variance with the commonly received opinions upon the subject, he is induced to lay before the Society a brief account of the case, and of the result of his examination.

George Clarke, aged twenty-three, was admitted into the London Hospital for an enlargement of the right testis, consequent upon a blow sixteen months previously. He had been under treatment by different surgeons, and the tumour had been twice tapped. On the first occasion, a teaspoonful of clear fluid was discharged; and on the second occasion, between two and three ounces of a dark-red fluid were drawn off. The swelling was increasing and becoming more painful. It was removed in the usual manner. On making a section of the gland, the tunica vaginalis and tunica albuginea were found thickened and partially adherent. Beneath the latter tunic, the tubuli seminiferi formed an expanded layer over the diseased mass. This layer, which varied in thickness, could be readily peeled off the surface of the tumour to the back part, where it was firmly adherent. The tumour appeared to spring from the corpus Highmorianum within the tunica albuginea, and was principally composed of cysts, containing a straw-coloured serum. It also contained a substance of yellowish colour, presenting a reticular appearance, and a quantity of lymph unorganised.

It appears to the author, from an examination of this specimen, that the opinion of Sir Astley Cooper, which assigns the tubuli testis as the seat of the cystic disease, cannot be maintained, this part being natural in appearance, although spread out over the surface of the tumour. On inspecting other specimens of the same disease, he has remarked a firm layer surrounding the cystic tumour, which he regards as the tubular layer condensed by the pressure of the tumour and by inflammation.

No discussion took place on any of the papers reported this week. The other abstracts, with the remarks to which one of them gave rise, shall be given in the next number of the *Medical Times.*

STATISTICAL SOCIETY.

Colonel SYKES, F.R.S., Vice-President, in the Chair.

The paper first read was a "Statistical Account of the Provisions for Paving, Lighting, and Cleansing the Streets and Public Places of the Metropolis," by Joseph Fletcher, Esq., Honorary Secretary.

Some of the difficulties and delays attendant upon the present legislative endeavours to improve our system of sanatory police, appear to arise from the want of a better understanding of the authorities charged with the duties of sanatory police, as already defined. These have chiefly been brought into existence by local acts, which, during the last two centuries, have created an extraordinary variety of corporations, of various organisation, dissimilar powers, and arbitrary limits, which are monuments of the local energies which gave them birth, and which maintain them in an existence of considerable efficiency, notwithstanding the inconveniences resulting from their conflicting powers, and the general wastefulness of their management. The present paper gave an outline of the constitution, powers, funds, and operations of the bodies now charged with the paving, lighting, cleansing, and prevention of nuisances in the streets of the metropolis; thus completing the account of the existing system of managing the streets and subways of London, which had been commenced by the like outline of its provisions for sewerage and supply of water. The present system of managing the streets in the city dates from the great fire, immediately subsequent to which the old experiences and the new necessities of the city in these matters were embodied in a statutory code of regulations, and the duty of carrying them into effect was vested in the committee of Common Council which forms the commission of sewers for the city. The consolidated rate to defray the cost of the paving, lighting, and cleansing, is by the issue of precepts to the common councilmen of the several wards, to make a rate on a stated scale, per pound, within the legal limit of 1s. 6d., and have it collected by the ward-collectors specially appointed to that duty. On two several occasions, 1813 and 1825, the metropolitan street-trusts were required to make returns to Parliament of their income and expenditure, and on these occasions returns were received from 16 in the west of London, 17 in the north of London, 25 in the east of London, and 5 in the south of London; in all 63. A subsequent return, in March, 1831 (including the suburban turnpike-roads), adds nearly 60 to the above list of trusts, which levy rates and tolls upon the inhabitants, and have a separate and independent management—these being, in fact, the greater number of such as are independent of parochial limits. All the works under the several trusts, whether within or without the city, are professedly done under public competition, whether lighting, cleansing, or paving. The contracts for lighting are taken by some or other of the existing gas-companies, which comprise eighteen establishments, and employ a capital of £2,800,000, in works, pipes, tanks, gasometers, and apparatus. The number of persons employed in this trade being about 2,500, besides 380 lamp-lighters, employed in the care of 30,400 public lamps which illumine the streets. The supposed advantages of competition in the supply of gas, are, however, as fallacious as those of imagined competition in the supply of water. Ample interest for the capital (double, treble, quadruple what is required for effecting the services) which has been laid down by rival companies in the same street and districts, is inevitably levied on the public, under terms of compromise between the several companies, terms which convert the fancied competition into a monopoly divided into shares, while the condition of the streets is greatly deteriorated by the multiplied occasions to remove the pavements to get at such an excessive number of pipes, for purposes of repair, &c. The efficient cleansing of the poorer parts of the town, which comprise its most unhealthy quarters, is certainly not accomplished under the existing system, if we accept the evidence of the officers of the commissions of sewers, who rebut the charges made against them by asserting that fevers are caused by the filth which remains unremoved about the habitations of the poor. Of the wisdom and economy of the local trusts without the city, in regard to the paving of the several districts, there is no documentary evidence, but much rumour which is not praise; and the wretched state to which the thoroughfares under their management were reduced during the greatest mutual competition of the water and gas companies, compelled a parliamentary inquiry, out of which arose the present valuable paving act of the metropolis, which gives some degree of uniformity to the proceedings of these bodies, whether styled commissioners, trustees, or vestrymen. It is the 57th of George III, c. 29, commonly called Michael Angelo Taylor's Act. Though this important act is restricted in its operation, yet many of its provisions are now enforced throughout the metropolitan police district of the act of 1839, which regulates the police as well within the city as without, and by which every person guilty of offences therein recited against public decency and cleanliness in the streets, is subjected to a penalty not exceeding 40s. for every offence. The local trusts comprise a number of turnpike trusts in the suburbs of the metropolis, on the south side of the Thames, but only two on the north, because the other trusts on the north side, to the number of fourteen, were consolidated in 1827 by the local act of 7th of George IV, c. 142, and placed under the commissioners of metropolitan roads—a self-perpetuating body, responsible to Parliament, and laying an annual report and statement of accounts before the House of Commons. This body commenced its operations under a debt of £127,050 13s. 5d., with only £810 to meet it, but was soon enabled to remove all the gates which obstructed the very streets of the town; retaining only sufficient on its outskirts to supply a revenue of between £75,000 and £80,000 per annum, with which it has gradually paid off the debt, brought the roads to a state of great excellence, and lighted them also, until the recent obstruction of traffic from the old coach roads by the railroads compelled them to throw back this latter duty upon the several parishes; the produce of these tolls in the year ending 25th of March, 1844, having been no more than £66,414 19s. 5d., from 39 gates and 66 sidebars. These facts show the very satisfactory working of a consolidation, which it is to be regretted does not embrace the remainder of the metropolitan turnpike trusts, and one which, in many of its principles, admits of extension to the crowd of petty paving, cleansing, and lighting boards, amongst which the town is divided.

There were then read abstracts of two short papers, entitled respectively a "Statistical Account of Batticaloa, Ceylon," by Mr. Selby Taylor; and "Comparative Statistics of the Committals for Trial in London and Birmingham, and in England and Wales respectively," by Henry Knight, Esq.

MISCELLANEOUS CORRESPONDENCE.

MR. HUNT AND MR. YEARSLEY.

[To the Editor of the Medical Times.]

SIR,—Permit me to correct a mis-statement in Mr. Thomas Hunt's communication to the current number of the *Medical Times.* I beg to say that I *never* suffered myself to be brought into "public newspaper collision" with that person. I am quite sure I may say as much for Dr. Smith.

I beg to enclose a copy of the certificate alluded to by Mr. Hunt.[1] You will observe that it testifies to the perfect and early recovery of upwards of two hundred patients (generally in three or four days) from the effects of *the operation,* and not, as Mr. Hunt would have you and your readers believe, from *their malady.*

The circumstances under which this certificate, with many similar, from physicians and surgeons of eminence, eye-witnesses of my operations, were required, will no doubt be still in the recollection of your readers, and need not be further adverted to. I have no desire to rip up old grievances.

For the reasons which have hitherto saved me

[1] "Vigo-street, March 10, 1842.

"MY DEAR SIR,—"Agreeably to your wish, I have examined upwards of two hundred patients living in the metropolis and its neighbourhood, upon whom you have operated for defective speech—many of them had been operated on full twelve months ago, and not one less than six months;—in no instance did I discover that any injury or inconvenience had resulted from the operations, or that any of the functions in which the throat is concerned had been impeded in the slightest degree. In those cases in which the uvula had been excised, the voice was generally stronger, and of better quality than before. In those who were singers, the compass of the voice was declared to have been increased. The dyspnœa and pain at the chest which generally attends stammering, had been in almost every case relieved. In cases where the tonsil glands had been enlarged, and in consequence removed, the parties expressed themselves relieved of the discomfort to which such morbid conditions give rise. I enclose you a list of patients which I have visited, and every one testifies to their early and perfect recovery (generally in three or four days) from the effects of the operation.

"Believe me yours very faithfully,

"W. TYLER SMITH, M.B.

"James Yearsley, Esq."

from public newspaper controversy with Mr. Thomas Hunt, I forbear to notice the other points in his letter.

I am, Sir,
Your obedient servant,
JAMES YEARSLEY.
15 Savile-row, June 29, 1846.

*** We have printed Mr. Yearsley's note exactly as we received it. We fear that the denial, in *verbal* terms, of a "collision," and the distinction about Dr. T. Smith's certificate are not all that the profession expected from Mr. Yearsley, and the leading-article writer, his relation, under the circumstances divulged. The certificate, too, is couched in terms of less proximate friendship than we were prepared for coming from a brother-in-law.—ED.

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted members of this College on Friday, June 26, 1846:—J. Hunt, W. R. Bridges, T. B. Purchas, W. S. Saunders, H. Stewart, J. Clarke, P. Cummins, R. Sandford, S. C. Griffith, W. Cock, and A. Reith.

APOTHECARIES' HALL.—The following gentlemen were admitted licentiates on the 25th of June, 1846:—Walter Yates, James Gregory, and Charles Tipple.

NAVAL APPOINTMENTS.—Surgeon: H. T. Osman, to the Inflexible. Assistant-Surgeons: S. Sterret, to the Inflexible; A. Lillie, M.D., to the Pantaloon; E. G. Irving, M.D., of the Tortoise, to the Styx; M. Bruton, M.D., from the Crocodile, to the Dido.

NAVAL INTELLIGENCE.—The following officers came home in the Vixen from Ascension:—Dr. Lennox Cunningham, of Ascension Hospital, and Dr. Looney, surgeon of the Pantaloon, as invalid. Dr. Yeoman, late surgeon of the Styx, died at Ascension Hospital of fever on the 11th of May. Dr. G. E. Irving, of Ascension Hospital, has been appointed surgeon to the Styx, vice Yeoman, deceased.

According to report, there is a project on foot to connect all the Natural History Societies with the Linnæan, under the denomination of sectional branches. The Linnæan Society will consequently be the head or principal society, holding a position with respect to the other societies similar to that occupied by the British Association, with respect to its several sections. There is to be only one general fund, to which all subscriptions are to be paid, and from which all the expenses incurred by the different societies, are to be defrayed. It is further proposed that the fellows of the Linnæan Society, who are to pay the same amount of subscription as at present, are to be *de facto*, fellows of the other societies, but the fellows of the respective sections, who are to pay a smaller subscription, will belong only to the section of which they are members, being, however, at the same time eligible as fellows of the Linnæan. The meetings of the sections, as well as of the Linnæan Society, will be held at the establishment in Soho-square. Gentlemen belonging to any of the sections, will be allowed to avail themselves of the library, museum, &c., of the Linnæan Society. As a matter of course, the latter will be enriched by the libraries, musea, herbaria, &c., of the other institutions, which will be blended with it. There can hardly be a doubt, but that such a scheme, if carried into execution, will be most advantageous to the interests of science, and of the Natural History Societies, which will mutually aid and assist each other.

OBITUARY.—On Sunday, the 28th instant, at Paignton, near Torquay, in his 68th year, James Domville, M.D., formerly of Greenwich Hospital, and Deputy Medical Inspector of Royal Naval Hospitals and Fleets. Died, June 21st, at Woolwich, aged 56, Mr. James Marsh, the inventor of the apparatus for the detection of arsenic. Mr. Marsh held the situation of practical chemist at the Royal Arsenal, Woolwich, and was assistant to Dr. Faraday, at the Royal Military Academy. Died, June 27th, at Portwood, Stockport, Thomas Taylor, Esq., Surgeon.

MAHOMMEDAN PHYSICIANS. — A Bostonian, Thomas Wells, Esq., who has travelled extensively over the eastern part of the world, has written a book, entitled "Letters on Palestine," containing a vast variety of curious information, fitted to the benefit of all classes and ages of readers. On the 177th page, a notice of the medicine-taking propensity of the Sultan's obedient subjects, occurs, together with an illustration of the character and state of a hakim, or doctor. On our arrival at Zahle, we were beset with half the population of the place—some out of curiosity, some to get medicine, believing us to be doctors in the healing art. A late tourist travelling in this direction, gives an amusing account of a fat, jolly-looking dame, the picture of rude health, who insisted upon his feeling her pulse. It was in vain that he declared himself to be no hakim—physician. She would not be satisfied till he yielded to her request, and by assuring her that she stood in no need of medical aid. A dose of medicine would have been the most acceptable of all presents. Of the extreme eagerness of the Mahomedans after physic, a ludicrous instance lately occurred at Constantinople. No persons are allowed to practise there as hakim, without a license from the Government, for which, of course, they are obliged to pay highly. A man had set up as doctor without this diploma; the police were sent to apprehend him. Instead of seizing the culprit, they allowed him quietly to slip away, while they made a rush at his phials and gallipots, and swallowed, indiscriminately, the whole contents of his physic shop. Luckily, it consisted of simples only, and no harm was done. The practitioners in physic among the Mahomedans are usually barbers; and in a country, of course, where every man's head is shaved, the professors of the healing art cannot fail to be numerous. Their knowledge of the science of medicine must necessarily be extremely confined. They, however, perform a few surgical operations, and are acquainted with the virtues of mercury and some standard medicines. The general remedy in cases of fever and other kinds of illness, is a saphie from a priest, which consists of some sentence from the Koran, written on a small piece of paper, and tied round the patient's neck.

HOSPITAL FOR CONSUMPTION, CHELSEA.—The funds of this institution have been greatly increased by the proceeds of the Bazaar held in Chelsea College, the week before last, for its benefit. Upwards of £2,000 having been handed over to the treasurer of the hospital.

FOREIGN QUACKERY.—Imagine a cloud of wasps, hornets, vicious and evil-doing animals which throw themselves on the public to deceive, entice, cheat, devour, and poison, to practise on folly, weakness, and credulity. Picture audacity and baseness, cupidity without shame, cunning and craft, infamy begrimed with mire, and you will still have a defective idea of what quackery has become in Paris. Formerly it was feeble and cringing, it sought to hide and to disguise itself; it is such no longer; now it has become proud, haughty, and arrogant; it marches glorying in its strength and its freedom. Not only does it contemn science, good sense and truthfulness, but even authority, which knows not how to suppress it. It knows that to kill a patient with a nostrum, is at most a simple infringement of the law (contravention) which may be arranged by payment of a few francs, and the poisonings continue. But these *curing chevaliers d'industrie* with diplomas, and without, who undertake every thing that belongs to their profession, swarm in all parts. This mischievous social element has not yet occupied the thoughts of legislators and political economists; but it will occupy them. In the mean time the evil remains huge—and worse—constantly increasing.—*Gazette Medicale de Paris.*—We see by the above that England is not the only country overwhelmed with quacks and their poisonous nostrums. Truly, as our *confrère* above quoted remarks, the evil *is* huge and constantly increasing.

ENGLISH QUARTERLY JOURNALS.—Twelve or fifteen medical journals are at this moment published in the three kingdoms, the greater number of them appearing weekly, a few monthly, and some every three months. The last class are not known in France, and verily their absence is not much to be deplored. Guy's Hospital Reports (an academical collection rather than a repertory, open to all comers), the *Edinburgh Medical and Surgical Journal*, and the *Dublin Journal of Medical Sciences* (in which interesting original communications often appear) being excepted, the other quarterly journals are nothing but voluminous collections of extracts, borrowed from English or foreign works. The British and Foreign and the Medico-Chirurgical Reviews especially show this mode of composition, and seem to be eternally devoted to a tiresome editing by strokes of the scissors. If we add that these extracts, which are sometimes inserted to the extent of a quarter or a third of the whole work, consist not in analyses, but in textual reprints, generally without any criticism accompanying them, you will easily understand that they are a description of work which the French *esprit* would be unable without much difficulty to reduce itself either to publish or to read.—*Gazette Medicale de Paris.*

A new establishment has just been formed near Paris, in which it is proposed to exhibit remedies to patients by giving them the milk of cows and goats, to which the proper medicaments have been previously administered. A pleasant mode of taking medicine by deputy, but we fear not over likely to prove successful.

MEDICAL COLLEGE, BENGAL.—This excellent institution has just been recognised by the Council of the Royal College of Surgeons of England, the University of London, and the Society of Apothecaries.

PATHOLOGICAL SOCIETY OF LONDON.—A new society under this name is about to be established; it has long been a subject of surprise that members of the profession, numbering among themselves some of the most distinguished pathologists of Europe, and in the first city in the world, should have been so far behind-hand in establishing a society for the encouragement of the study of morbid anatomy and pathology, considering the success which has attended the proceedings of the Société Anatomique de Paris, the Pathological Society of Dublin, and the societies more recently established in our large provincial towns.

WORCESTER INFIRMARY.—A large meeting took place last week to take into consideration the propriety of altering the rules and regulations to the exclusion of the medical staff of the hospital from attendance at special committees. Mr. Cutler moved the adoption of the new regulations, and a clergyman seconded it, but it was signally defeated by a majority of nearly two to one. We congratulate Dr. Hastings and his colleagues on this defeat of the enemies of the institution.

MORTALITY TABLE,

For the week ending June 27, 1846.

Causes of Death	Total.	Average of 5 summers	Average of 5 years
ALL CAUSES . . .	890	892	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	150	162	188
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	112	98	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	150	155	157
Diseases of the Lungs, and of the other Organs of Respiration	230	271	291
Diseases of the Heart and Blood-vessels . . .	28	26	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	91	65	72
Diseases of the Kidneys, &c.	7	7	7
Childbirth, Diseases of the Uterus, &c.	14	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	10	6	7
Diseases of the Skin, Cellular Tissues, &c.	6	1	2
Old Age	30	60	67
Violence, Privation, Cold, and Intemperance . .	59	25	26

No. 354. SUMMARY JULY 11.

PROGRESS OF MEDICAL SCIENCE

INCLUDING CHEMISTRY AND PHARMACY.

France.

ACADEMY OF SCIENCES.

Meeting of 29th June, 1846; M. MATHIEU in the Chair.

FUNCTIONS OF THE CEREBELLUM—DISORDERED MOTION—CASE; BY DR. GODART.

In June, 1845, a middle-aged lady fell in the street, and, some few days later, knocked the right side of the back of her head against a piece of furniture. In the month of July, the person who combed her hair perceived on the injured spot an indolent swelling, about one inch in diameter, and two lines in elevation. No medical assistance was called in up to December, when the tumour had acquired the size of the head of a full-grown fœtus; it was quite hard, and pressure occasioned neither pain nor any sign of cerebral compression. From this time forward, Mrs. H. often surprised herself and other persons by what she conceived to be an unaccountable awkwardness in the management of her hands; it soon appeared, however, that it was due to organic change within the cranium. The patient became in a few weeks unable to walk, although no diminution had taken place in the power of contraction of the muscles of the limbs. At last paralysis of motion set in towards the end of February, and the patient died on March 13th.

Dissection.—Externally, the tumour, which turned out to be an effusion of plastic lymph under the pericranium, covered the occipital and right parietal bones, and the scaly portion of the temporal. Internally, between the bones and the dura mater existed a corresponding enlargement, three inches in diameter, and one in elevation, pressing upon the right cerebral hemisphere, and flattening the cerebellum. The superficial part of the cerebral substance in contact with the tumour was in a diffluent state. The abdominal and thoracic viscera were healthy.

ACADEMY OF MEDICINE.

Meeting of June 30th, 1846; Dr. ROCHE in the Chair.

THE PLAGUE.

M. Londe observed that, in his opinion, the reporter should have attached himself only to the solution of one question, viz., the possibility of the importation of the plague into healthy countries. Now, if a single, well-authenticated, and incontrovertible fact was produced in demonstration of that possibility, quarantines were necessary; if no such fact was brought forward, quarantines should be abolished. Now, M. Londe contended that no case deserving of credit had been adduced by the commission. The present subject was fraught with difficulties, and it would doubtless be said to him that one single case of propagation out of epidemic centres could not be done away with by thousands of instances of non-transmission. This M. Londe would readily grant, but the single case must be one which could admit of no doubt whatever, or else the argument would be worthless. Thus, we cannot disinherit the eye of its function, because it pleases a mesmerist to assert that his somnambulist can read a book with her back or her shoulders. In this case, the facts of daily experience, which prove the impossibility of vision without the assistance of the eyes, will surely not be shaken in the minds of sensible men by the supposed affirmative fact of the mesmerist. It is true the cases of transmission of the plague are not surrounded with the same mystery and marvel as the mesmeric phenomena, but yet they are not the less exposed to be modified or misinterpreted by those whose interest it is to change them. Examining analytically the facts brought forward by the commission, M. Londe concluded that their value was far smaller than it was supposed by the reporter. M. Londe remarked that whenever the plague broke out in Europe, Asia, or Africa, it had always coincided with very well marked conditions of insalubrity. That, in Ancient Egypt, where the science of public hygiene was carried to a most advanced state of perfection, the plague was unknown; but that fine country became afflicted with the scourge when it abandoned those useful sanatory regulations which had preserved it for upwards of three thousand years. M. Londe would remind the Academy that every year seventy or eighty thousand pilgrims went from all parts of the Turkish empire to Mecca, and yet had never *once* carried the plague with them. In Arabia, no case of plague has ever been observed, although the country is in habitual intercourse with Cairo, Alexandria, and Constantinople. M. Londe insisted, therefore, upon the remark that the plague has never been observed in those countries in which unfavourable physical conditions are not present, and endeavoured to demonstrate that, even in countries where the epidemic is raging, isolation is no pretension against the disorder. In the three centuries which preceded the establishment of lazarettoes, a hundred and five epidemics were observed, and one hundred and fifty three during the three centuries which followed. Every statement of the commission went also to prove that bales of goods could not import the plague into France. Had it not been set forth in the report, that since 1720 not a single workman employed at the lading and unlading of ships had ever been struck with the pestilence. After answering in a few words the remarks made by Dr. Bosquet, M. Londe concluded by the following propositions:—1, The plague is not transmissible out of epidemic centres; 2, it is not propagated by bales of goods; 3, the absence of quarantines does not assist the propagation of the disorder, neither does their severity interfere with it; 4, hygienic improvements are the only useful means of averting the invasion of the plague.

M. Parisot: Gentlemen,—You have just heard Hippocrates; now listen to Galen (laughter). The learned secretary of the Academy then read the first part of an answer to the report, and was listened to with the most delighted attention, although his remarks did not always bear very directly upon the practical parts of the subject, but rather upon the historical details of the report. It is not in our power to reproduce, even faintly, the literary merits of his composition; nor will we attempt it. We will only delineate the substance of his observations, after merely stating that M. Pariset's long residence in the Levant must give his opinions great weight in the Academy and in the scientific world. M. Pariset began by blaming the definition of the plague chosen by the reporter. "The plague," said the report, "is a disease of the whole system, in which the nervous, circulating, and lymphatic organs are chiefly affected." M. Pariset would ask if a single general disorder could be imagined without these three sets of organs participating more or less in the sufferings of the patient? To complete the definition, to make it a *real* one, it would have been necessary to point out what are the special alterations of these systems in the plague; and this is an impossible task. A woman stands up to dance, another stammers slightly for the first time in her life, and both fall dead, struck by the plague as by a thunderbolt. What are, in these two women, the changes of the nervous, circulating, or lymphatic systems? In these sudden deaths, buboes, petechiæ, carbuncles are absent, and yet the patients have died of the plague. All these circumstances render a definition very difficult, if not impossible. The contagious nature of the disorder, so generally admitted, cannot even enter into the definition; for the plague always begins with one man, who gives without having received it, and is terminated by another man, who receives, but does not communicate, the disorder. The reporter asserted that the plague existed in Egypt 2113 years before the Christian era. Now, if he counted by the descending chronology generally in use, beginning at 4004, at the creation of the world, and descended to 0 the Christian era, this plague would have preceded the deluge by ninety-five years, which cannot be admitted. If, on the contrary, the reporter had counted the years of the world, beginning at the creation, with 1, and descending to the Christian era, 4004, then the plague he had mentioned would have preceded by three years the expedition of of Cecrops, the founder of the kingdom of Athens. But where is the proof of the assertion—where are the records of that period? Of all the nations of antiquity, not one rose to the same perfection as Egypt in arts, sciences, industry, and power. The wisdom of the Egyptians had descended to the consideration of the most minute details of human life and public hygiene was perfectly understood by them. Knowing, probably by fatal experience, the dangers of putrid animal emanations, they excavated the country, and in subterraneous cities of immense extent they placed birds, fish, quadrupeds, men—all, in fact, from the rat to the crocodile. The establishment of the principle of *salting* the dead bodies (an expression which M. Pariset purposely employed, the word *embalming* bearing with it a notion of expense, which has caused many persons to misunderstand the real object of the custom), the salting, therefore, of dead bodies was for the preservation of Egypt—a condition not less neces-

sary than the air, the waters, the soil itself, and it might be said that the very fruitfulness of the country rendered that usage necessary, and caused it to become a religious injunction.

The meeting adjourned at 5.

THE SPAS OF THE RHINE—THE SALINE MURIATIC SOURCES; BY PROFESSOR TROUSSEAU AND DR. LASSEGNE.—(Section 2 continued.)

Hombourg.—Of all the spas the waters of which should be taken on the spot, Hombourg is perhaps that in which are united the most favourable conditions. The abundance of mineralising principles, its numerous amusements, the comforts and luxury of its arrangements, have given to Hombourg a reputation which medical experience has sanctioned. In treating of the disorders these waters relieve, we will speak of their therapeutic action; for the present, we limit ourselves to the simple statement of their composition and mode of exhibition.

Five very different sources exist at Hombourg. The "Elizabeth" is well known since 1831; its temperature is 10° cent. (50 Fah.); its taste salt and pleasant, not by any means sickening; when first taken it produces an increase of appetite and excitement of the gastric organs, which nervous subjects avoid by mixing it with milk or common water. Five hundred grammes, or one pound of the water, contain:—(Liebig) Chloride of sodium, 4 grammes =one drachm; chloride of calcicum, 0·40 cent.= eight grains; carbonate of lime, 5·50 cent.=ten grains; carbonate of magnesia, 0·10 cent.=two grains; carbonate of iron, 0·10 cent.=two grains. Where carried to great distances, the waters of the source Elizabeth deposit a red precipitate of carbonate of lime and iron, and thus lose a portion of their acid, but remain very palatable—a circumstance of no small importance when it is recollected that their exhibition in chronic disorders must be of very long duration. The source "Louis" hardly deserves a special mention, its temperature being the same as that of the former, and differing only very immaterially from it in composition; its taste is a little more bitter, and the waters disengage a large quantity of carbonic acid.

The *Kaiserbrunnen* is the richest of all in saline principles; its taste is sulphurous; and although in no analysis is hydrosulphuric acid mentioned, still a paper impregnated with acetate of lead is speedily blackened when brought near the surface. Five hundred grammes of the water contain:—(Liebig) Chloride of sodium, 6 grammes=one drachm and a-half; chloride of calcium, 0·60 cent. =twelve grains; chloride of magnesia, 0·35 cent.= seven grains; carbonate of lime, 0·60 cent.=twelve grains; carbonate of iron, 0·04 cent.=four-fifths of a grain. The waters also contain a certain amount of free carbonic acid. Few patients can accustom themselves to drink of the Kaiserbrunnen, which is more recommended at Homburgh at the close than at the beginning of the treatment.

The *Stahl-brunnen* is ferruginous, and contains nine-tenths of a grain of iron, to one ounce of water. The baths are furnished by two cold founts of the same composition as the Kaiserbrunnen.

Soden.—The composition of the waters of Soden places them in analytical order immediately after those of Hombourg. They contain in one pound of water:—Chloride of sodium, one drachm and a-half; chloride of potassium, two grains; carbonate of magnesia, one grain. Their temperature is +10 to 12 (50° to 55°). If the therapeutic properties of the waters were alone taken into account, Soden would undoubtedly rival Hombourg, and is better for those who prefer quiet seclusion on a beautiful spot to the noisy amusements and dissipations of a fashionable spa.

Kissengen cannot be called a Rhenish spa, and, therefore, does not belong to our subject; but large quantities of its waters are every year forwarded to France, and we may consequently mention their composition. The weakest of its sources, the Moxbrunnen, is not exported. The Ragozzi contains according to Kastner, one drachm of chloride of sodium, two grains of sulphate of soda, and two grains of sulphate of iron, to one pound of water.

Sect. 3.—Mode of exhibiting the saline, muriatic, spas, cura sine catharsi and cura per catharsin:—

1. *Dry cure.*—The analogy of composition between the Rhenish spas, permits us to apply some general rules to their mode of exhibition. Uniting all the spas into one great class, and taking into account only the properties common to all, their therapeutic action is better understood. The physician cannot but remark that at all these various watering places, two effects only are sought for and obtained—viz., the dry and the purgative cure. These are not two degrees of the same treatment, but two distinct treatments corresponding to very different indications, which, therefore, it is extremely important to detect. In the dry cure, the patient drinks in the morning from half a glass to two glasses of the water, and often takes the same quantity in the evening; but the water should not produce more than one motion in twenty-four hours—a precept which renders strict attention to diet a matter of absolute necessity. When the mineral waters are prescribed at a distance from the spa' the attention must even be greater. We begin generally with a quarter of a tumbler to children and one-half to adults. The stomach soon becomes accustomed to the waters, and the dose may be safely increased. In some patients, however, it is necessary to exhibit at once a large quantity, particularly in those whose digestive organs are rebellious to purgative action. These circumstances must be well thought of and weighed when mineral waters are prescribed in any particular case: it is much more difficult to appreciate their action in the cure sine catharsi than in the purgative cure, because we are accustomed to the use of purgative medicines. We know their physiological action—we can safely calculate upon a crisis which we prepare, and can guide, and limit. We can easily measure the perturbation introduced into the system by any local action, but it is not so when we have recourse to those substances which slowly modify the entire system, like the waters employed in the dry cure. The changes produced are general, and slow; no functional disturbance is observed, but the effects of the treatment vary considerably according to the constitutions of the patients. The recovery is gradual; the restoration, like that produced by nature, takes place by imperceptible degrees. We cannot better demonstrate the virtues which we attribute to the dry cure than by pencilling in a rapid sketch the various circumstances wherein its beneficial influence is most apparent. The difficult task we have undertaken would be much simplified were it possible to class the saline muriatic spas amongst one of those great therapeutic divisions which we adopt in our materia medica—viz., antiphlogistics, alteratives, antispasmodics, &c.; but such a method would at present only cause us to lose the little we have gained by the analytical history of mineral waters.

The dry cure is chiefly advisable when the blood is not sufficiently supplied with cruor in anemia, consequent upon accidental or pathological hemorrhage, or in chlorosis, atonic gout, and those very dangerous cases of debility, resulting from the abuse of alkaline preparations. We find it again indicated in protracted convalescence—in those wastings which do not recognise a tubercular or cancerous diathesis for their cause. Now all these forms of debility clearly belong to the same family; after the chloride of sodium contained in the waters has dispelled the morbid condition, the medicine begins to act on the healthy organism, and produces its physiological effect. It is then that the patient has to fear active congestion towards the head, lungs, rectum or bladder, accidents which all writers mention when treating of the subject, and which it is necessary to be on our guard against, because it is extremely difficult to say when the saturation of the patient has been effected. It is not to the atoms of iron contained in the saline waters that this efficacy must be attributed; it is to the *salt.* Thus, the Hombourg waters when brought away from the source deposit *all* the iron they contain, and still continue as useful in cases of anemia. Experience has demonstrated beyond discussion that in chlorosis iron is heroic; but anemia and chlorosis are two very distinct disorders, and not to be cured by the same method. Chronic dyspepsia with a tendency to diarrhœa, should be treated with the saline muriatic waters, but with the greatest prudence—beginning with half a glass and increasing the doses only very gradually. Exercise is an indispensable adjunct of the treatment; but if the symptoms do not yield with readiness, one or two smart doses of neutral salts, followed with a little extract of cinchona, prepare the bowels admirably for the use of the mineral waters, and are often productive, in bold hands, of the most satisfactory results.

Certain forms of cachectic disease, better known to us in their cause than in their nature, are also very much benefited by muriate of soda. Thus, in long convalescence from acute diseases, when evening feverishness, loss of appetite, and the impossibility of bearing ferruginous preparations, often brings the physician to a stand, the salt is of the greatest advantage. The anemia consequent upon intermittent fever accompanied with enlargement of the abdominal viscera, and a tendency to serous dropsy, are generally happily modified at Hombourg; but when these accidents have acquired a certain degree of development, the waters of Hombourg cease to be of any use. Purgative doses must not be employed. The paroxysms of intermittent fever might be recalled, and we all know how difficult in certain cases it is, usually, to arrest diarrhœa. The efficacy of the treatment depends upon a wise degree of slowness in the exhibition of the medicine; but the waters may be more boldly advised in cases of anemia resulting from the abuse of alkaline purgatives. During some few years, alkaline waters have acquired for the treatment of gout and gravel an unbounded reputation, which cannot be too deeply deplored. Vichy, Carlsbad, Ems, and Schlangenbad, have puffed beyond measure the antiarthritic properties of their spas. Many imprudent patients, relieved at first by the alkaline waters, have paid dearly a few weeks later for their credulity. After a few weeks of apparent health, anasarca, diarrhœa, and dropsy appear, and medicine cannot lengthen their days, nor even diminish their sufferings. If the injury inflicted by the alkaline waters is not quite so considerable, muriatic saline waters, particularly those which contain a small proportion of iron, are extremely useful. Often, even, their use is continued until a return of an attack of gout warns the physician and the patient that it is time to stop the tonic treatment. The most easily digested waters are those which should be preferred. Thus, the waters of Wiesbaden cannot replace those of Hombourg, Soden, or Kissengen, because, although they contain almost the same proportion of the salt, yet they have not the same amount of free carbonic acid.

Purgative cure.—To change into the second the first sort of treatment we have described, it is only necessary to increase the doses. The extreme limit of these is six or eight glasses. The purgative waters cannot all be placed in the same class, because the increase of intestinal secretion is only the first step of the treatment, and the evacuation of the intestines could be more easily obtained by the use of Epsom, Glauber, or Seidlitz salts. During a short time, muriatic waters seem to depress the system, but after a few days they heighten the pulse, and favour the development of uterine or abdominal congestion. Such are the chief indications of the saline muriatic waters. It is now evident that the separation of the two methods of treatment is absolutely necessary; in reality we have but one drug, but we have two medications. Many examples of this double action of medicines may be observed by casting our eye over the pharmacopœia, and perhaps the most remarkable is in the difference of action of calomel when prescribed in minute doses, or as a purgative.

DAN. M'CARTHY, D.M.P.

Italy.

POPLITEAL ANEURISM TREATED BY GALVANISM.—M. Ciniselli records the following case of popliteal aneurism in the *Gazetta Medica di Milano.* The patient, a man of strong constitution and large stature, had been healthy up to the age of seventy, about which time (October 1845), he first perceived a pulsating tumour in the right popliteal space. The rapid increase of this disease soon rendered progression difficult and painful, and by December he was scarcely able to take a few steps in his room. In January, 1846, he was admitted into the hospital of Cremona, with a popliteal aneurism of about the size of a goose's egg, occupying

the whole of the region, and pulsating strongly in every direction. By compressing the femoral artery the tumour decreased in size. The internal popliteal nerve was stretched on the inside of the swelling, between it and the tendons of the flexor muscles. Complete extension of the leg was impossible. The articular capsule of the knee-joint appeared swollen at the side of the limb, and the pulsations were felt through these swellings, and by the side of the patella. M. Ciniselli was unable to discover any pulsation on the distal side of the tumour, either in the leg or the foot; but the pulsations in these situations were inappreciable in the other limb, although in it the popliteal artery beat more strongly than natural. Both legs were full of varicose veins, and covered by a dry integument, which presented traces of old ulcers. On this account M. Ciniselli was unwilling to risk the operation of ligaturing the femoral artery, and he wished to try the effects of gradual compression on the tumour, aided by the use of astringents. The indocility of the patient, however, compelled him to desist from this plan soon after its commencement. Having met with the recent researches of M. Petrequin on the subject of inducing coagulation of the fibrinous portions of the blood in aneurisms by means of galvanic action transmitted through needles, he was anxious, in this somewhat unfavourable case, to try M. Petrequin's method. On January 22nd, therefore, he commenced the process. The patient having been placed on his side, and compression made on his thigh, M. Ciniselli introduced four very fine needles into the tumour, two on the inside in a vertical line, taking care to avoid the trunk and branches of the saphena vein. The other two he introduced on the outside, but a little lower in the limb. The first two needles M. Ciniselli directed downwards through the tumour, the others, on the contrary, he directed upwards, so that they crossed one another in the tumour without touching each other. This being done, M. Ciniselli next proceeded to increase the compression on the thigh, so as to stop the arterial pulsation in the tumour without causing it to shrink. This M. Ciniselli considers to be of considerable importance, as it increases the size of the coagulum formed, and enhances the success of the operation. M. Ciniselli then connected a battery formed on the spot, composed of twenty-one pairs of copper and zinc plates. The galvanic current was transmitted across the tumour through two of the needles, the intensity of the action being increased by the addition of more plates. The galvanic action was continued during twenty minutes. One needle was touched at a time with each of the poles, and the needle was changed every two or three minutes, each being touched successively by both poles, and the galvanic current transmitted in every direction through the tumour, so that fibrinous filaments might be obtained, which would interrupt the course of the blood through the aneurism. Each new contact of the poles produced, first, a smarting in the tumour, and afterwards contraction of the muscles of the calf, and a kind of shock in the sole of the foot. The patient was very restless, and constantly altered the tourniquet, so as to allow the pulsation to reappear in the tumour; thus taking away almost all hope of success. The needles were, therefore, removed after some little difficulty, on account of their oxidation, and the tumour was covered with a bladder full of ice, the tourniquet being still applied with sufficient tightness to prevent pulsation in the aneurism. The patient, however, being very indocile, removed the tourniquet, which M. Ciniselli had wished to remain to favour coagulation. The application of ice was continued during six hours, at the end of which time the aneurism pulsated as before, and M. Ciniselli feared that the operation had effected no benefit. On the morning of the 23rd of January, the day after the operation, the pulsation continued with the same violence. M. Ciniselli remarked, however, that on compressing the femoral artery the tumour did not shrink as before, and that it diminished very little in size. In the middle of the day, twenty-four hours after the galvano-puncture, there was no longer any pulsation. The patient even got out of bed, and took a few steps in his room, but he still felt a slight numbness in his leg. During the following days the tumour diminished by degrees, and became harder; the lateral depressions of the knee became apparent; the numbness disappeared; complete extension of the leg was practicable; progression was free, and there only remained a slight sensation of weight in the foot, which might be attributed to the dragging from its place of the popliteal nerve. On the 29th of January, the patient was so elated by his unhoped for cure, that he would no longer remain in the hospital. On the 8th of March M. Ciniselli again saw the patient, at which time the tumour was reduced to the size of a hen's egg; it was quite hard, and the inconveniences experienced from the dragging on the popliteal nerve were rapidly disappearing. *** We wish especially to call the attention of our readers to the above case, as pointing to a means of treatment of aneurism which certainly deserves an extensive trial. We believe that the successful cases of M. Petrequin, related in a former number of the *Medical Times*, were the first observations on the subject.

America.

Poisoning by Camphor.—Dr. Reynolds, in the *British-American Journal of Medical and Physical Science*, relates a case of poisoning by camphor. The patient, a healthy man, aged twenty, of full habit, while standing in a druggist's shop, unconsciously swallowed bit by bit about two drachms of camphor in the course of a few minutes. He almost immediately felt a degree of headache coming on, and went out into the street. He felt highly exhilarated, and having met a friend, proposed a rubber of whist to him, remarking that he felt singularly clear-headed, and he was sure he should be able to play an excellent game. Soon after sitting down his gestures and conversation became very strange and wild. He left the room suddenly, went into his bed-room, and soon returning naked, jumped wildly about, and attempted to throw himself from the window. Dr. Reynolds was called, and found him in this state of excitement almost amounting to frenzy; his pulse 180 and small; conjunctiva injected; pupils not much dilated, and scarcely sensible to light; countenance pale and haggard; breathing hurried, and at times greatly laboured; constant desire to make water, with pain in the course of the spermatic vessels. Urine clear, having, in common with the perspiration, a very strong smell of camphor; a clammy sweat over the whole body. Drachm doses of vinum opii, which happened to be at hand, were administered every fifteen minutes. After the third dose there was a desire to vomit, which was encouraged by draughts of vinegar and water, and some of the camphor was ejected. After the vomiting the patient became drowsy, but as the pulse was still very small, and the respiration hurried, it was thought advisable to keep him awake, and to continue the vinum opii every twenty minutes. After a few doses the pulse became fuller and less frequent, the countenance less anxious, the perspiration less hurried, and the patient was allowed to go to sleep. He slept about three hours, starting now and then, but becoming gradually more composed. On waking, he had only a confused idea of what had happened. He recollected something about camphor, and asked what he had been doing. There was a little headache and stupor after the opium, and the bladder and stomach were irritable for several hours. These symptoms gradually disappeared, however, but he was unable to take his customary quantity of wine at dinner for some time after without feeling an unpleasant effect on his head. Some excellent remarks on the action of camphor are to be found in the 11th volume of the *Medical Times*.

Fracture of the Sacrum preventing Delivery.—Dr. A. H. David, of Montreal, records a case of fracture of the sacrum impeding delivery, in the *British-American Journal of Medical and Physical Science*. The accident occurred in the fourth month of pregnancy, by the patient's falling down stairs. On the commencement of labour, delivery was found to be impossible, and craniotomy was suggested and partly performed, when the patient, in spite of the earnest entreaties of her friends, refused all further assistance: of course death took place. On post-mortem examination the sacrum was found to have been broken into four pieces, two of which projected out of its usual line, and all were united by a firm callous band, which formed the projection into the vagina and impeded delivery.

Anomaly of the Descendens Noni Nerve.—Mr. Samuel Parkman, demonstrator of anatomy in the medical school of Haward University, Boston, records, in the *American Journal of Medical Sciences*, a case in which the descendens noni nerve had no connection with the hypoglossal on either side, the filament which should have come from the hypoglossal being supplied by the pneumogastric. The same occurred on both sides, but on the right the junction took place a little lower down than on the left, and the pneumo-gastric filament at the point where it touched the descendens noni passed upwards in a retrograde direction so as not to enter into the distribution of the nerve. The distribution of the descendens noni was normal, but from its deeper origin in the neck it did not appear so immediately on the anterior aspect of the sheath of the vessels as it usually does.

England.

Statistics of Midwifery.—Mr. Earle gives, in the *Provincial Medical and Surgical Journal*, a statistical account of 4320 cases of midwifery, attended by himself and his sons. Of these there were:—Preternatural presentations, 178; cases of hemorrhage, 38; laborious labours requiring the forceps, 32; cases of convulsions, 8; cases of twins, 53. Of the preternatural presentations:—The arm presented in 30; the shoulder, 4; the legs and feet, 40; the breech, 41; the hip, 13; the chest 2; the belly, 2; the side, 2; the ear, 2; the face, 4. Of the cases in which hemorrhage occurred:—The placenta was attached to the os uteri completely in 10; the attachment to the os uteri was only partial in 12; the hemorrhage appeared to arise from partial separation high up in the uterus in 16. Slight cases of hemorrhage are not included in the table. 17 cases occurred which were fatal to the mother, one from the chin hitching over the pubes; in this case, after long and fruitless attempts at delivery, the head was opened; the mother died five days after, with febrile symptoms. Two from dropsy, the patients being in the last stage at the time of their delivery. Three from hemorrhage, two being cases of placental presentation. One from fever, the result of mismanagement on the part of the nurse. Three from convulsions. Two from puerperal fever. One from hepatitis and peritoneal inflammation. Two from diarrhœa. One from peritonitis, after forceps delivery; and one, a patient, aged forty, in her eighth labour, which was quick and easy; collapse supervened as soon as the child was born, and she died in two hours. A fortune-teller had predicted that this woman would have a child in her fortieth year, and would never recover; and Mr. Earle suggests that her death might be the result of the moral influence of this prediction. Of the 53 cases of twins:—Both were natural presentations in 19; both breech ditto in 2; both foot ditto in 8; one head, one foot in 12; one head, one arm in 6; one head, one breech in 3; one breech, one foot in 2; one arm, one leg in 1. Eleven cases of monstrosity or malformation are recorded. Case 1. The upper part of the cranial bones were wanting; the brain covered with integument; the head was quite flat; large protruding eyes; hare-lip; the arms remarkably short, and very much resembling the fore legs of a quadruped. It lived about two hours. 2. An enormous hydrocephalus. Born dead. 3. All the abdominal viscera completely protruded, being only covered by the peritoneum. Born dead. 4. Large scrotal hernia; immense umbilical hernia. Lived three weeks. 5. The whole of the upper portion of the cranium without bone. Born dead. 6. A similar case to the above. Lived four hours. 7. Ditto. This child lived two days; and it is very remarkable that all three cases occurred to the same woman. Three other children which she has had are all of them well-formed and healthy. 8. Large spina bifida. Lived one day. 9. Ditto. Born dead. 10. Large spina bifida; hydrocephalus. Born dead. 11. The upper portion of the bones of the head appeared as if they had been removed by the saw, the brain being covered only with a thin membrane, so that the convolutions

of the brain could be distinctly seen. The child lived three days. Many cases of adhesion of the placenta have occurred, in which it has been needful to introduce the hand to remove it. In one or two instances several hours elapsed before it came away and in one case the uterus contracted upon it so strongly that it was impossible to pass up the hand but after remaining six days it came away, diminished considerably in size, but entire, and no bad symptoms occurred.

SCHIRRHUS OF THE EYE BALL.—In the *Provincial Medical and Surgical Journal* Mr. Gibb reports a case from the practice of Mr Greenhow in which the patient, a stout, healthy-looking man aged fifty, had for fourteen years suffered from repeated attacks of inflammation of the left eye. In about twelve months from the first attack of inflammation, the power of vision was entirely lost on the affected side, but the transparent media of the organ presented no appreciable alteration. The inflammation had been attributed to cold. About three years after, from a more violent attack of inflammation than usual, some opacity was perceived for which portions of the iris and cornea were removed without benefit. After the operation the eye continued slightly collapsed until within the last two years, when it began to project, from which time it continued to increase in size until he came under treatment in January, 1846, in the Newcastle Infirmary. He then had occasional pain in the orbit and left side of the head after excitement or exposure to cold. He had no affection of the other eye, and no glandular swellings. On the 13th of January, the eyeball was extracted in the usual way, after which the patient went on so well that, on the 28th of the same month, he was made an out-patient. The tumour, after its removal, was found enveloped by a capsule of condensed cellular tissue, which surrounded it at every part, and was, in no place injured by the knife of the operator. It possessed all the characters of genuine scirrhus; was of the size and shape of the orbit; ended rather abruptly behind, where no trace of the optic nerve could be detected; whilst in front a little of the choroid, the optic chambers, and the altered cornea, compressed, and occupying a space of only two or three lines in extent, were the only discoverable remains of the eye, and they were inseparably agglutinated to the surrounding substance of the tumour. Up to the commencement of June, when the patient was last seen, he continued in excellent health.

SPONTANEOUS GANGRENE.—Mr. Henry Dayman reports, in the *Provincial Medical and Surgical Journal*, a case of spontaneous dry gangrene, which occurred in a boy, aged ten, the son of a labourer. The patient had always been well clothed and fed. When first seen, he laboured under slight febrile symptoms, with petechiæ on his legs. Four days afterwards the spots had disappeared, but the tip of the nose and the pinna of each ear, the calves of the legs, the lips, a spot in each cheek, both hands, and part of the right forearm, were of a dark colour, presenting the appearance of effused blood; the tongue white, no appetite, secretions healthy. No alteration was visible for several days, nor did any other part of the body become affected subsequently. Seven days after the discoloured spots were quite cold and without sensation. Gangrene had taken possession of them, and although the boy lived fourteen months from the date of the commencement of the attack, no other parts of the body became diseased, neither did the gangrene spread in the parts affected; nature, in making an effort to relieve herself of the dead members, did not exhibit the same action, or activity of purpose at all points. In the calves the disease was thrown off, but instead of healthy granulations and skin, dry scales like the bark of a tree were formed. The tip of the nose, and ears, and the lips, dried and dropped off, leaving the surface underneath quite healthy; a line of separation became apparent at an early period on the right forearm and left hand, yet no disunion took place. The saline treatment was in the first place adopted; afterwards tonics and a generous diet were substituted. Unfortunately no post-mortem examination could be obtained, so that whether the gangrene originated in any malformation or disease of the circulating system must remain a matter of conjecture.

ORIGINAL LECTURES.

Lectures on some of the more Importan Points in Surgery.

Delivered at the Royal Westminster Ophthalmic Hospital Charing Cross.

BY G. J. GUTHRIE, F.R.S., &c.

LECTURE IX.

The operations on the posterior tibial and peroneal arteries, The operations on the anterior tibia artery, The operations on the carotid artery The operations on the arteria innominata and the subclavian artery; The operations on the axillary artery; The operations on the brachial artery The operations on the ulnar artery; The operations on the radial artery.

On the Operations on the Posterior Tibial and Peroneal Arteries.

The posterior tibial artery may require to be tied between the ankle and the heel. In this situation its pulsation may be felt, and will be the best guide to the artery. It has the tendons of the tibialis anticus, and of the flexor digitorum communis nearer to the malleolus than itself, and distant about a quarter of an inch; there is a vein on each side of the artery. Posterior to this is the posterior tibial nerve, and nearer the heel the tendon of the flexor longus pollicis; a little below this part the artery divides into the external and internal plantar arteries. To tie the artery near the heel, its pulsation should be felt, and an incision about two inches long made upon it, through the common integuments and superficial fascia; a strong aponeurosis will be found beneath, covering the sheath of the vessels and adhering to the tendons. This aponeurosis must be carefully opened, and then the sheath of the vessels the artery should be tied with a single ligature. The nerve is nearer the heel.

The posterior tibial artery may be tied a couple of inches higher up in the small part of the leg, by making the incision on the tibial edge of the soleus muscle, under which it lies; but in the middle or calf of the leg, a different operation should be performed for the purpose of placing a ligature upon it in a case of wound. The old method, and that which I have recommended, have been sufficiently contrasted in the third lecture, to which I now refer. The first incision, six inches long, should be made nearer to the inner edge of the leg than to the centre, and should be carried through the gastrocnemius muscle, plantaris tendon, and soleus muscle, down to the fascia, under which the artery lies with its accompanying veins, having the posterior tibial nerve to the fibular side of it. If the incision has been made in the upper part of the calf of the leg, the peroneal artery will be exposed by it; but if the peroneal artery be the vessel injured, the incision should be made towards the fibular side of the leg; and when the surgeon divides the fascia he will find this artery covered by the fleshy fibres of the flexor longus pollicis muscle, at any distance below three inches and a half from the head of the fibula; which fibres must be divided, when the artery will be found close to the inside of the bone. Above that part the artery is under the fascia, and upon the tibialis posticus muscle. It has not an accompanying nerve. Both arteries will be readily found, by either of the incisions described, if the surgeon is acquainted with their situation.

On the Operations on the Anterior Tibial Artery.

The anterior tibial artery is to be tied at that point of its course in which it may be wounded. When the operation is done for aneurism, it should be performed a short distance above the tumour, and sometimes a second operation below it will become necessary. If the aneurism should be situated so high up, and so close to the origin of the vessel, as not to admit of a ligature being applied anterior to the interosseous ligament, it must be placed on the femoral artery in the thigh, and the result awaited. If it appeared likely to succeed first, and that the pulsation returned slowly, the artery should be tied below the tumour, because the return of pulsation would probably depend on the blood regurgitating into the vessel; or a ligature may be placed in the first instance upon the trunk of the popliteal artery above where the anterior tibial is given off, by the same operation as is recommended for the ligature of the posterior tibial, the incision being begun a little higher up.

In order to tie the anterior tibial artery near to its passage from the back to the fore part of the leg, after it passes into the interosseous space and over the interosseous ligament, and for one-third of its descent towards the instep; draw a line from the head of the fibula to the base of the great toe, which will nearly describe its course. An incision four inches in length is to be made in this line down to the fascia covering the muscles; and the foot be bent upwards and again extended, the bellies of the tibialis anticus and extensor digitorum communis muscles will be more distinctly seen. The fascia is to be divided for the whole length of the incision between them; and they are then to be separated for the same distance by the scalpel and the finger; the artery will be found close on the interosseous ligament, between its two venæ comites.

In the middle third of the leg, the origin of the extensor proprius pollicis intervenes between the tibialis anticus and extensor communis digitorum muscles. The anterior tibial nerve, a branch of the peroneal, attaches itself to the artery a little above this middle part, and is usually found in front of it, although it is not constantly in that situation. care should always be taken to avoid it.

In the inferior part of the leg, the artery lies on the tibia, having the tendons of the extensor digitorum communis on the outside, that of the extensor proprius pollicis on the inside, by which it is overlapped, being also covered by the fascia and the integuments.

On the instep this artery runs over the astragalus, the naviculare, and the os cuneiforme internum, to the base of the metacarpal bone supporting the great toe. It here divides into two branches, one dips down between the first and second metatarsal bones, to join the terminating branch of the external plantar artery; the other passes on to the inside of the great, and the opposite sides of the first and second toes. The artery is always to be found on the fibular side of the tendon of the extensor proprius pollicis.

On the Operations on the Carotid Artery.

The carotid artery may be tied in almost any part of its course, and in the following way:—The patient being seated with the shoulders supported, in such a manner that the light may fall on the neck, the head is to be bent a little forwards, to relax the muscles on the fore part. An incision is then to be made on the line of the inner edge of the sterno-cleido-mastoideus muscle, by which the integuments, the platysma myoides, and superficial cervical fascia are to be divided. The extent of this incision, in persons with long necks, may be from a line parallel with the cricoid cartilage to about half an inch of the sternal end of the clavicle: when the neck is very short, it must be begun as high up as the lower edge of the thyroid cartilage, so as to be as nearly as possible three inches in length. The sterno-cleido-mastoideus muscle is then to be drawn outwards, with any vein which may be seen attached to its under edge. The pulsation of the artery will point out its situation, and the sterno-hyoideus and sterno-thyroideus muscles being drawn and kept inwards, the omo-hyoideus will be seen crossing in the upper part of the hollow thus formed by the separation of these parts. The central tendinous portion of this muscle is attached and fixed by the deep cervical fascia, and lies immediately over the sheath of the vessels, and particularly over the jugular vein. This fascia, which is strong although thin, is to be carefully divided below the muscle, and immediately over the centre of the artery, the position of which is to be accurately ascertained by the finger. At or beneath the same spot, the sheath of the artery is to be opened; and the long thin nerve, the descendens noni, which runs upon the sheath, will at this part be seen inclining to the tracheal side of the artery. It is to be separated and drawn inwards with the muscles. If the sheath of the artery be carefully opened immediately over its centre, the jugular vein will scarcely interfere with it. But as it has been

known to enlarge suddenly under the exertions or excitement of the patient, so as to overlap the artery, it has been recommended to make gentle pressure on the vessel at the upper part of the incision, and below if necessary, in order to prevent this occurrence. The aneurismal needle is then to be introduced and passed under the artery from without inwards, by which the jugular vein and the par vagum nerve will be avoided, more particularly if the sheath of the vessels has been undisturbed, save where it has been opened immediately over the artery. The point of the aneurismal needle is to be brought out close to the inside of the artery and within its sheath, by which means all danger will be avoided of injuring either the recurrent or sympathetic nerves which lie behind or to the inside of it. As to the œsophagus, thoracic duct, or thyroid artery, they are not likely to be injured by any common operator; but he should be aware, that on the left side, if he is obliged to operate low down, he may meet with greater inconvenience from the jugular vein, which is more anterior to the artery, and rather overlaps it, whilst on the right side it inclines outwards from it.

The carotid artery may be tied higher up in the following manner.—The incision in this instance should terminate a little below where the former one begins, and must of course proceed upwards for the same length of three inches, in a line extending towards the angle of the jaw. The head should be laid back to enable this to be done, and ought to be kept in that position by an assistant. The artery at this part of the neck is covered by the integuments, the platysma myoides muscle, and the fascia. After the muscle has been divided, the strong fascia must be carefully raised by the forceps and opened, and the operator will do wisely in dividing it upwards and downwards on the director. With the end of the scalpel or a blunt knife he should separate the cellular texture from the veins, which appear in this situation, and are often the source of much embarrassment. The sheath of the artery is to be opened over the centre of the vessel, and the ligature is to be passed around it as before. The descendens noni nerve runs in general on the outside of the artery in this part of the neck, and afterwards crosses over to the tracheal side. The par vagum, which lies in the angle formed posteriorly by the apposition of the carotid artery and jugular vein, and to which latter it is more particularly attached, is to be avoided on introducing the aneurismal needle; and on bringing it out on the inside, the same attention must be paid to prevent injury to the great sympathetic or any of its branches. The surgeon in both these operations should draw the ligature first a little outwards and then inwards, so as to enable him to ascertain that he has included nothing in it but the artery, which is to be tied with two knots; one end may be cut off, or both may be twisted together, and brought out of the wound opposite where the vessel has been tied. The integuments should be accurately closed by adhesive plasters, and the patient put to bed with his head bent forwards, and properly supported. He should eat as little solid food as possible until after the ligature has come away; and observe even greater precautions as to quietude than in other instances, especially if the operation has been done for a wound of a branch which cannot be exposed.

The external carotid artery may be tied by an operation conducted in a similar manner. After the first incisions have been made, and the strong cervical fascia divided, the operator must feel for the pulsating vessel, which will be found on a line parallel with the cornu of the os hyoides, below which part the common trunk usually divides into the external and internal carotids, the external being the more superficial and internal of the two at their origin. The external carotid turns with its convexity inwards; and nearly opposite but rather above the os hyoides it is crossed by the ninth or lingual nerve, the digastric and stylo-hyoid muscles, and it is below this part it should be tied. Whenever the external carotid is secured by ligature, on account of a wound of a part which cannot be reached, the ligature should be applied near to its origin, that is, immediately below where the superior thyroid artery is given off, and without fear of evil occurring from the vicinity of the internal carotid.

When any of the branches of the external carotid are wounded, they ought to be tied if possible at both ends, and at the part wounded. If this cannot be done, and the hemorrhage demands it, the external carotid is the vessel on which the ligature should be placed; for by cutting off at the same time as many as possible of the anastomosing arteries, a better chance is given for the closing of the injured part of the vessel.

On the Operations on the Arteria Innominata, and on the Subclavian Artery.

The arteria innominata arises from the upper part of the arch of the aorta, generally on a line nearly parallel with the upper edge of the cartilage of the second rib, ascends obliquely towards the right side, and usually divides opposite the sterno-clavicular articulation into the right subclavian and the right carotid arteries; the last of which appears to be its continuation, although the smallest in size. The arteria innominata is about two inches in length, rarely exceeding two inches and a-half, although it is very variable both in length and situation, so much so as to sometimes render the operation of placing a ligature upon it during life unpracticable. It is covered by the right vena innominata, which receives the left at a right angle, near the origin of the artery. Exterior to the vena innominata are the sterno-thyroideus and sterno-hyoideus muscles, some strong fascia covering the vein at its upper part, and the first bone of the sternum. The arteria innominata may ascend higher in the neck before it divides, in which case its pulsation will be perceptible in front of the trachea, and the subclavian artery will cross higher in the neck, which is one reason for not continuing the external incision down to the sterno-clavicular articulation in the operation on the right carotid. The subclavian artery, given off behind or a little above the articulation, proceeds outwardly for the space of one inch before it reaches the inner edge of the scalenus anticus muscle, which is about half an inch in width; so that the subclavian artery, when it clears the outer edge of the scalenus anticus muscle in a tall man, is not more than one inch and a-half or three-quarters from its origin, even to the spot at which a ligature is usually placed upon it. The first branch given off is the vertebral on the upper and back part of the artery, and distant from the carotid at the bifurcation half an inch. The thyroid axis is given off at the anterior and upper part of the artery, a quarter of an inch more outwardly, and the internal mammary often arises directly opposite from the anterior and inferior part of the artery, descending into the chest behind the junction of the first and second ribs with their cartilages. The inner edge of the scalenus anticus muscle is close to these two last vessels. The phrenic nerve crossing this muscle obliquely lies on the outside of the thyroid axis, and on the inside of the internal mammary artery; having crossed the subclavian artery at this part, it descends between it and the junction of the internal jugular and subclavian veins to the chest. Internal to this, some small branches of the great sympathetic nerve, which lies itself behind, pass over the artery; and still more internal, but distant about a quarter of an inch from the carotid artery, the par vagum crosses likewise. The only point at which the subclavian artery can be tied internal to the edge of the scalenus anticus muscle is at this point, on the inside of the par vagum, and in a space scarcely more than one quarter of an inch in width, to which the carotid will be the best guide. It appears to me that a ligature may be as readily and as safely applied around the innominata immediately below its bifurcation, as around the subclavian close to the same spot, although little reliance can be placed on success attending either operation.

From this view of the parts it will be evident, that the operation may be most advantageously done in the following manner. Raise the shoulders of the patient, and allow the head to fall backwards, by which the artery will be drawn a little from within the chest. Let an incision be made over and down to the sterno-cleido-mastoideus muscle, the sternal origin of which, and nearly the whole of the clavicular origin, should be divided on a director, carefully introduced below it, avoiding some small veins which run below and parallel with its origin. An incision is now or previously to be made two inches in length along the inner edge of the muscle, which will admit of its being raised and turned upwards and outwards. Some cellular texture being torn through, the sterno-hyoideus-muscle is brought into view, and should be divided on a director. The sterno-thyroideus is then to be cut through in a similar manner. A strong fascia and some cellular texture here cover the artery, having the nerves above mentioned running beneath it, the carotid being to the inside, the internal jugular vein to the outside. By following the carotid downwards, the finger will rest on the innominata and on the origin of the subclavian, and a ligature may be placed on either. If on the innominata, the aneurismal needle, and several kinds should be at hand, should be passed from without inwards, immediately below the bifurcation, and close to the vessel. If on the subclavian, the surgeon must recollect, that there is only about a quarter of an inch of this artery on which the ligature can be applied; this small space being bounded internally by the carotid artery, and externally by the par vagum above, and the vertebral artery below. The ligature should be applied close to the vertebral artery, the needle being passed from below upwards; the greatest care being taken to avoid the recurrent nerve, which separates from the par vagum at this part, and winds under the subclavian and carotid arteries, to be continued upwards to the larynx. If the ligature be placed on the arteria innominata, the same care must be taken to draw the par vagum outwards, and to avoid the recurrent nerve. The edges of the wound should be brought together and dressed in the usual manner; the head being bent forwards on the trunk, and maintained in that position in order to relax the parts, and admit of their being kept in apposition.

This operation ought only to be performed in cases of aneurism of the subclavian artery, in which it is presumed that the disease extends as far as the external edge of the scalenus anticus muscle, but not more inwardly. The arteria innominata has been certainly tied five, if not six, times in vain, and in two or three other instances the attempt failed, the operator not succeeding in his object. In Dr. Mott's case the ligature came away on the fourteenth day, but the patient died from hemorrhage, the consequence of ulceration of the artery, on the twenty-sixth day after the operation. Dr. Graefe's patient also died from hemorrhage on the sixty-seventh day. It is evident from these cases, that a man may live so long after the operation as to show that he does not die from the immediate effects of it, or from any that must necessarily take place. It is therefore possible, that if the operation be often repeated it may eventually be successful.

The left subclavian artery rises perpendicularly out of the chest like the innominata, but on a plane much posterior to it, so that at the part where the vertebral artery is given off, and which is about an inch and a half from the origin of the artery, it lies nearly an inch deeper from the surface than the vessel on the opposite side. It is covered by, or is more directly connected with, the important parts which are only in the vicinity of the right subclavian. The pleura adheres to it, and must be torn in putting a ligature around it. The par vagum is parallel and anterior to it. The internal jugular vein and the left vena innominata lie over it. The thoracic duct and œsophagus are connected with it; and the carotid artery is in front. So that with the most careful dissection it is not a very easy matter to place a ligature upon the ascending portion of the left subclavian artery, without doing more mischief than is compatible with the life of the patient.

Aneurisms of the arch of the aorta have been sometimes known to appear so far beyond the outer edge of the scalenus anticus muscle, as to impress the surgeon with the idea that they arose from the subclavian artery, and that an operation on that vessel might be attended with success. This error is not likely however to occur in the present day; the stethoscope will always point out the existence of such an aneurism within the chest, and will therefore demonstrate the impropriety of the operation. Aneurisms of this nature are usually attended by some circumstances indicating their more internal origin, independently of the

information derived from the stethoscope; but an operation should only be attempted when the case is free from doubt.

Whenever an aneurismal tumor in the neck is accompanied by any alteration of the sterno-clavicular articulation, the case is clearly one totally unfitted for any operation. The same may be said of any case of aneurismal swelling, either internal or external to it, in which the stethoscope applied on the sternum in the course of the arteria innominata, or of the arch of the aorta, indicates disease. A swelling at the root of the carotid is more likely to be an aneurism of the arch of the aorta, or of the arteria innominata, than of the carotid itself, and the stethoscope will remove all doubt.

The subclavian artery has been frequently tied above the clavicle, and *external* to the scalenus anticus muscle. It should be done in the following manner. The patient being placed horizontally on the table, in such a situation that the light may be directed into the hollow in the bottom of which the artery is to be tied, the shoulder is to be depressed, and an incision made along the edge of the clavicle, commencing one inch nearer the sternum than the clavicular edge of the sterno-cleido-mastoideus muscle, and carried outwards to the extent of three inches and a half or four inches. The platysma myoides and superficial fascia are to be divided, taking care not to injure the external jugular vein, which should be drawn to the outer side of the wound. By this incision the edges of the trapezius and sterno-cleido-mastoideus muscles will be exposed.

The object of the operation is in the first instance to reach the outer edge of the anterior scalenus muscle this lies immediately below the outer edge of the clavicular portion of the sterno-cleido-mastoideus, and the division of a portion of this part of the muscle will greatly facilitate the subsequent steps of the operation, although it may be done without it. The artery will be found crossing over the first rib at the very edge of the attachment of the scalenus anticus to it; but a quantity of cellular substance and fascia intervene, which must be torn through before it can be exposed. This should be done with a blunt round-pointed knife, in a line parallel with the first incision, but more immediately over the outer edge of the scalenus muscle. The omo-hyoideus muscle passing obliquely across the root of the neck will be in this manner exposed which should be clearly done, because it narrows the space in which the operation is to be performed to a small triangle, the outside and apex of which is formed by this muscle, the inside by the scalenus anticus, the base by the rib, above it the subclavian vein, and above it again, but under the clavicle, the supra-scapular artery and vein. The blunt knife working in the triangular space, will first expose one or more of the nerves of the axillary plexus, which again diminishes the space; more inwardly the scalenus anticus will be felt, and should be seen by tearing through the thin fascia which lies behind the omo-hyoideus and is connected with it. The point of the finger, assisted if necessary by the blunt knife, should be passed along the edge of the muscle until it rests on the first rib, and at the angle formed between the muscle and the rib the artery will be found and known by its pulsation. The operator should detach the artery in a slight degree from its connections with the point of the nail, and the aneurismal needle should be passed in preference from below upwards, by which the pleura will be avoided. After the ligature has been passed under the artery, the vessel should be pressed upon with the point of the finger, whilst the ligature is firmly held in the other hand, by which the circulation through the artery will be stopped, and the pulsation in the tumor and at the wrist will cease, when the ligature may be tied with a double knot, and for doing this one or two steel probes having a ring at the end of each, placed at a right angle with the shaft, will afford great assistance.

In some instances, and particularly in short-necked persons, the omo hyoideus lies close to the clavicle, and requires to be drawn upwards and outwards from it. In others, the lowest nerve of the axillary plexus lies over the artery, and may be mistaken for it. When the veins coming from the neck are large and numerous, more care must be taken to avoid injuring them, as they frequently cause, not only much hemorrhage, but great delay. Great care must be taken in all these operation to prevent the ingress of air into any of the vein which may by accident be opened, as its admission in quantity has occasioned sudden death, although the entrance of a few bubbles may not be so dangerous as has been supposed.

On the Operations on the Axillary Artery.

The patient being firmly supported or placed in the horizontal position, the arm is to be slightly separated from the body, and an incision is to be made in the course of the axillary artery, through the integuments, superficial fascia, and great pectoral muscle, in fact through the anterior fold o the armpit. The length of the incision will depend on the part at which the artery is to be secured It may begin however, as a general rule, near that part where the pectoral muscle first touches the deltoid. The parts divided being separated, the pectoralis minor will be seen crossing at the upper part of the wound to the coracoid process, and the artery may be felt below it, enclosed in its cellular sheath, with the nerves of the arm and its venæ comites.

At the lower edge of the pectoralis minor, the artery is crossed by the outer of the venæ comites which passes between the external cutaneous and the external origin of the median nerve, at the spot where they separate from the ple The artery may be tied below this separation, or the nerves and vein may be drawn to the outside, and the artery tied above the union of the external with the internal root of the median nerve and as high as the origin of the arteria thoracica acromialis, the pectoralis minor being either raised and pushed upwards, or divided. The internal root of the median nerve is in connection with the internal cutaneous and ulnar nerves; the larger of tl venæ comites is to the inside and behind, but as it ascends it receives its fellow, and with the cephalic vein forms in front of the artery the subclavian

On the Operations on the Brachial Artery.

The brachial artery can be traced by its pulsation from the lower edge of the teres major muscle to below the bend of the arm, where it is covered by the pronator radii teres muscle At first it is to the ulnar side of the humerus, resting on the triceps, and slightly overlapped by the coraco-brachialis and biceps muscles. In the middle of the arm it rests on the tendon of the coraco-brachialis, is close to the bone, and lies under the lower edge of the biceps; in which situation it may always be compressed by bending the forearm, so as to cause the belly of the biceps to enlarge, when pressure made immediately below it will arrest the circulation in the brachial artery. It then crosses towards the anterior part of the arm and rests on the brachialis anticus muscle until it passes the bend of the elbow. It is accompanied by two veins, which are connected to it by a loose cellular membrane forming a sheath. The external cutaneous and median nerves lie a little to the outside of the artery at the upper third of the arm. In the middle third the median nerve lies generally in front of, but sometimes between the artery and the bone, and is on the inside at the inferior part The internal cutaneous nerve runs parallel but superficial to the artery, the ulnar nerve nearer but posterior to it. When a ligature is to be placed on the brachial artery in the upper part of its course, the incision should be made about three inches in length, and directly on the line of the pulsating vessel, by which all mistakes will be avoided. The integuments should be divided carefully, that the nternal cutaneous nerve may not be injured; the fascia is then to be cut through and the forearm bent, when the vessels and nerves will be relaxed. The artery is to be separated from its veins, one on each side; and it must be recollected that the external cutaneous and median nerves are to the radial side of the artery, the internal cutaneous and the ulnar nerves to the ulnar side of it. In the middle of the arm the median nerve lies immediately over the artery, except in cases where it passes behind it, and when it lies in front it ma be mistaken for the artery, from the pulsatio being communicated to it. The incision should be to the same extent of three inches, directly in the course of the artery, and the ligature should be passed from the ulnar to the radial side of the vessel, in order to avoid the possibility of including the internal cutaneous or the ulnar nerve, and for the purpose of excluding both the veins.

On the Operations on the Ulnar Artery.

The ulnar artery may be tied near the wrist, where it is most superficial. Bend the wrist, so as to make the flexor carpi ulnaris act, when the tendon will be felt internal to the styloid process of the ulna; make an incision two inches and a-half in extent along the radial edge of this tendon, dividing the fascia of the arm which covers it. The artery will be felt below the deep-seated fascia, and on dividing it will be seen with its venæ comites, the ulnar nerve being behind it, and which must be avoided in the application of a ligature. In the palm of the hand, the ulnar artery having passed over the annular ligament of the wrist, is covered by the integuments and the palmar aponeurosis. To tie the ulnar artery in the *middle third* of the arm, the surgeon should bend the wrist, and trace upwards the tendon of the flexor carpi ulnaris as far as it can be felt. At the point where it becomes indistinct an incision should be commenced and carried upwards for the space of four inches; the fascia is then to be divided for the same extent, when the flexor carpi ulnaris may readily be traced upwards by its tendon, which is on the radial side of it: this muscle may then be easily separated from the flexor sublimis, beneath the edge of which the artery will be found covered by the deep-seated fascia, having a vein on each side, and the ulnar nerve to the ulnar side of it. By this method of proceeding the artery will be readily exposed, which is not always the case by any other manner of operating, and it may be tied as high up as where it passes from under the flexors of the arm. It can only be necessary to tie the ulnar artery in the upper third of the arm in consequence of a wound; and in this situation it has been considered impracticable to do it. It may however always be done, and without much difficulty.

The brachial artery, a little below the bend of the arm, divides into the radial and ulnar arteries, the radial being the continuation of the brachial in direction, the ulnar in size. The brachial artery, at the bend of the arm, is cushioned on the brachialis internus muscle, having the tendon of the biceps on the outside, the median nerve on its inside, which is at first continued on the same side of the ulnar artery; but as that vessel inclines towards the ulna for about an inch, and then passes between the two origins of the pronator radii teres muscle, the median nerve crosses it at this part to get into the middle of the arm, and is then separated from it by the ulnar origin of the muscle. The artery continues its course, inclining outwardly, under the pronator radii teres, the flexor carpi radialis, the palmaris longus, and the flexor sublimis muscles, lying on the flexor profundus. On clearing the ulnar edge of the flexor sublimis, it is covered by the flexor carpi ulnaris; and at this part it may be tied by the preceding operation, the course of the artery having been obliquely under these muscles for the extent of two inches. To tie it in any part of this course, they must be more or less divided, and the only difficulty or danger arises from the median nerve, which lies deeper under the radial origin of he pronator teres. But the whole of the muscular fibres may be divided without injuring the nerve, by successive and careful incisions through them until the artery and nerve are exposed, and a ligature may then be applied above and below the wound in the vessel. It may be supposed by way of elucidation, that a man receives a wound from a sword through the flexor muscles, which injures also the ulnar artery, as may be presumed from its situation, and the continued and impetuous flow of blood. It shall be further supposed, that this wound is in a slanting direction from the ulna towards the radius. The surgeon may, if he thinks he can calculate the point at which the artery is injured, cut down upon it in the direction of the fibres of the intervening muscles, and even through them until he reaches the artery; but if he has erred in his calculation he must introduce a probe, and after having ascer

tained the line the wound has taken, he should cut if necessary across the muscular fibres in that direction until the exposes the bleeding artery, and if he is careful not to divide the median nerve, no inconvenience will arise from the operation.

If the ulnar artery is wounded near its origin, and through the radial side of the pronator teres muscle, an incision should be made through the integuments and the aponeurosis of the biceps muscle; the pronator muscle being then laid bare, it is to be drawn inwards and downwards or towards the ulna, and the dissection continued until the median nerve is exposed. The probe introduced through the original wound will lead to the artery, the pulsation of which will be felt and the bleeding seen. As the nerve crosses the artery, the vessel will be found above to the radial side of it, and to the ulnar side below. It may be tied above without dividing a muscular fibre; but at the part where the nerve crosses and below it, some fibres of the pronator teres must be divided, and in some cases the whole of them, before the artery can be properly secured by two ligatures.

On the Operations on the Radial Artery.

The radial artery may be secured by ligature with great ease in any part of its course to the wrist. At the upper third of the arm, the radial artery is covered by the junction of the supinator radii longus and pronator radii teres muscles. To expose it at this part, a line may be drawn from the middle of the bend of the arm to the thumb, which will indicate its course; or the supinator radii longus being put into action, an incision is to be made from the bend of the arm obliquely outwards along its ulnar edge, to the extent of three inches, avoiding the median vein, but dividing the integuments and the fascia. The supinator muscle is then to be gently separated from the pronator radii eres by the point of the knife or by its handle, and the artery will be felt covered by the deep-seated fascia; on the division of which, it will be seen with its venæ comites lying on some adipose membrane, and on some branches of the musculo-spiral nerve, which separate it from the tendon of the biceps, and which are to be carefully avoided. The musculo-spiral nerve itself lies nearer the radius, which renders it advisable to pass the aneurismal needle from that side.

In the middle third of the fore-arm, the inner edge of the supinator radii longus marks the line of the incision, which should be to the extent of three inches. The fascia being divided, the supinator longus is to be separated from the flexor carpi radialis, and on the division of the deep fascia, the artery will be found passing with its venæ comites over the insertion of the pronator radii teres, and the radial origin of the flexor digitorum sublimis. The musculo spiral nerve lies close to the radial side of the artery.

Near the wrist, the radial artery may be tied with great facility. Make an incision two inches and a half long on the radial side of the tendon of the flexor carpi radialis, which becomes prominent on bending the wrist; the superficial and deep fascia are to be divided, when the artery and its veins will be exposed; the nerve has not accompanied the artery to this part, where it lies, first on the flexor pollicis longus, then on the pronator quadratus, and lastly, in crossing round to the back of the hand, on the radius alon

The radial artery, on reaching the base of the first bone of the thumb on the back of the hand, lies close to it and under the three extensor tendons of the thumb. It then dips down between the first bone of it and the metacarpal bone of the forefinger, and enters into the palm of the hand, to form the deep-seated palmar arch; sometimes passing behind the abductor indicis and adductor pollicis muscles, sometimes perforating them. The treatment of wounded arteries in the hand is described in the 7th lecture.

The small pox rages at present, at Ceete, with frightful intensity. Within a few days many children have fallen victims to this disease, and adults even are not spared. The affection is of a malignant kind, and is said not to spare persons who have been vaccinated

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XV.

SCABIES.

According to Willan, and others.

SPECIES.	VARIETIES.
Scabies.	S. Papuliformis Lymphatica Purulenta Cachectica

As proposed by Startin.

GENERA AND SPECIES.	DIVISIONS.	
SCABIES. S. Papulata Pustulosa Vesiculata Scabida Ulcerosa	Localis. Generalis.	Sparsa Confluenta Inveterata

GENTLEMEN,—In fulfilment of the intimation last week given, I have to-day to claim your atten- to a contagious disease of the skin, to which the Latins have given the name of scabies, and the Greeks that of psora, whilst, as you know, the itch and various other soubriquets have been conferred upon it by the people of this country.

In the whole range of cutaneous diseases, perhaps not one could be signalized which has afforded a more fertile subject for disquisition by medical writers of all grades, from Celsus to the present day, than this loathed affection; many causes may exist for this extraordinary circumstance, such as its every day occurrence, its perpetual continuance with the individual attacked, unless remedies are used, and, above all, its contagion—that fruitful source of fears and vague misgivings, which the most learned, in this and other countries, have been baffled to account for by a reasonable hypothesis; it has been stated that the touch did, and did not, and that innoculation did, and did not, communicate the disease; then it was referred to insect life, and this again denied, even in our own times, by no less an authority than Rayer, who repudiates its existence as the usual cause of the complaint; inasmuch, as with many trials, and the aid of a microscope with a power of 500 diameters, he failed to demonstrate it.

Other parties have caught this insect, and by the aid of a watch glass have confined it on the skin, and have failed to become infected in every instan that the controversy would appear to be endless. Yet Mr Topping, at the side-table, will show you this *mite of contention*, and I can assure you I can very constantly discover it, in all the forms of true scabies it has been my lot to witness; and this I can accomplish without more power than that afforded me by the very convenient little glass, made for the purpose of minute dissection, by West, of Fleet-street, to which I direct your inspection, though a common reading glass of moderate power will answer the purpose equally well.

Not only are these creatures of the microscope the cause of the itch in the human race, but they can be demonstrated to extend in somewhat modified forms to brutes, and a mangy cur owes his torment to a variety of these acari, which Mr. Topping has the undoubted honour of having first discovered and delineated, and which he will be happy to show any gentleman present who is curious on the subject.

Scabies has been very unnecessarily complicated by Willan and others, who have subdivided it in a manner that leads to no practical result, as the treatment required is very much the same in all its varieties; as I stated last week, this disease affords a beautiful illustration of one exciting cause, producing in the same part of the body of differently constituted individuals, nearly every variety of inflammatory or disordered action of which that part is capable; thus Willan's divisions of papular, lymphatic, purulent, and cachectic scabies, are mere manifestations of the irritation produced by the *acarus scabiei*, in lichenous, eczematous, impetiginous, and ecthymatous *forms*; in addition to which, I have seen psoriasis, prurigo, porrigo, erythema, and urticaria, frequently produced in constitutions prone to exhibit these affections, which would thus encumber this common malady with four or five more varieties. I must observe, however, that these diseases, when thus produced, do not usually run through all their stages, but are found co-existing in a manner that most distinctively characterises scabies from all other affections of the skin, and they commonly subside on the disappearance of the original affection. The most common form of scabies is the modified vesicular, for in this form, or eczemation, as it was termed by Baron Alibert, inflammation of the human skin is most usually exhibited, as I had occasion to remark when speaking of eczema. I would, therefore, define scabies to be a contagious vesiculo-pustular inflammation of the follicles of the dermis, accompanied with intense itching, and manifesting itself more especially in those parts of the body where these organs are most developed; by an intermixed eruption of papules, vesicles, and pustules, originating from the irritation and presence of the *acarus scabiei*, or itch insect, and the development of its ova: these appearances commonly end in scabs, ulcerations, and discharges, which may be variously complicated with other cutaneous diseases, and without remedies they seldom or never disappear; all the stages of the disease having, for the most part, a simultaneous existence.

The insect which gives rise to this great variety of symptoms would appear from its form, which is very much that of the turtle on a minute scale, to be very ill adapted for burrowing and producing such disturbance as that I have attempted to detail; but I have little doubt that the fact is, the irritation proceeds rather from the hatching of the ova than from the burrowing of the old insects, and were I to offer an explanation of [illegible] process according to the gist of my own observ[illegible], I should say that an ovum of the insect, surrounded by the glutinous matter in which it is deposited, becomes translated from an infected to a sound individual by contact, or by sleeping in the same linen, &c., and that this minute body finds a lodgment in some of the follicles, groves, furrows, or even in the pores of the skin; this will be particularly likely to happen in the sheltered or hollow parts of the body, which are found to be precisely the situations infested by the complaint; the animal warmth soon hatches the insect, when the irritation it occasions produces a slight vesication, which the acarus endeavours to escape from by constantly bearing away from the centre to some one point in the circumference of the pimple, the irritation occasioned by its presence continuing to vesicate or raise the cuticle, so as to open a passage as it were for its progress to some point at a distance from the spot where it was hatched; in the mean while it will have deposited its ova in the liquid surrounding it, and have caused so much irritation as to induce the patient to scratch and break the pustule or vesicle, and give issue to its contents, which thus become spread around, and renew the original process, until the whole body becomes affected or colonised with these insect pests. The acarus scabiei would appear to shun the light, like many of the beetle tribe; consequently it is in the evening, as darkness approaches, that the torments occasioned by its movements are most experienced; the warmth of the bed-clothes would also appear to be one of its sources of delectation, for "when warm in bed" is the time selected by all patients for describing their most dreadful moment of irritation, which can often be only assuaged by abandoning the pillow for a time, and exposing the body to the cold.

It is a curious fact, that from time immemorial the inhabitants of the southernmost parts of Europe have been aware of the existence of these insects, which the old women and others skilled in such leechcraft were in the habit of extracting with the bent point of a pin, and it was described by Arab or Moorish physicians in the twelfth century, and first copied by our countryman Mouffet, the author of the "Theatrum Insectorum," a century afterwards. It is also mentioned by the learned Mead, in the "Philosophical Transactions" of 1702, and perfectly explained and illustrated by Dr. Hickman, of Hanover, in 1791, yet soon after this period it appears to have been lost or overlooked, and its ex

istence disputed or disbelieved until 1812, when a student under Alibert, at the Hospital of Saint Louis, M. J. C. Galles, announced he had again discovered it, but it has since been affirmed that he imposed upon all the learned of Paris a cheesemite for that of the itch—a fact verified by the plate he has left of the insect, and also by the want of success which attended all efforts to discover the acarus by following Galles' directions; and until ten or twelve years ago all was again involved in uncertainty respecting this parasite, at least in the French capital, when a Corsican student of medicine, M. Nenucci, who had doubtless seen the old women of his country perform their well-known operation of extracting the mite, pointed out the way in which it was to be done; which consists in following a slightly-raised ridge, proceeding from the pustule or vesicle, until a whitish point is visible; this is the acarus, which, by means of a pin, with the point a little bent, may, by a little address and rapidity, for they move briskly, be extracted without injury alive and active, in which state it may be kept some hours, or even days, a little warmth stimulating it into visible motion. Mr. Topping will show you this little creature (both living and dead), so that I shall not enter into its anatomical description beyond stating that it is of a white colour, with eight purplish legs, furnished at their extremities with long hairs; its shape is much that of the turtle or tortoise, and rounder than the cheese-mite, which is oval, and it has the power of drawing up its legs so as to conceal them beneath its body. I show you M. Raspail's plates of these parasites; the large one in the second plate is the itch insect of the horse, and Mr. Topping will show you that of the dog.

I feel I ought to apologise, Gentlemen, for dwelling so long on this portion of our subject, which I fear you may deem prolix or tedious, but, in the consideration of so common a malady as scabies, I felt that it was important to add my mite of information towards the elucidation of a subject of so much controversy; and I assure you I have scarcely touched on many of the points at issue, but will refer those who feel a further interest in the subject to Kirby and Spence's work on Entomology (vol. i., p. 91), and to the paper by M. Raspail in the little work I hand round. You will perceive by the chart that I have divided scabies into four species, two divisions, and three varieties, which I have named after their manifest appearances; but it is very uncommon to see this disease in an unvaried form, so that these characteristics must be regarded as an attempt to render language precise when describing the affection. The species of scabies according to this chart are papulata, pustulosa, scabida, and ulcerosa; the divisions, localis, and generalis; and the varieties, sparsa, confluenta, and inveterata.

It will be perceived that these names are applied to the different appearances exhibited by scabies, whether these be papular, pustular, scabious, or ulcerated, and confined to one locality, or spread generally over the body, and this is a scattered, confluent, or inveterate form.

From what I have advanced on the cause of the contagion of scabies, you will readily believe that no rank, age, or condition, can be exempt from its attacks; and also, that it commonly commences in a point, and extends over the whole body, those parts being usually affected which are most out of the way of accidental friction, &c.; and thus the face is rarely the seat of the complaint, in so much that Willan and Bateman excepted this part of the body from being liable to the attacks of the disease—an exception which I am constantly proving to have been founded on erroneous conclusions. The casts of scabies I have to submit to your notice are not so good or complete as you might have expected from the rumours that were so energetically circulated concerning this Institution a twelvemonth ago, but the fact is, those incorrect reports have had the effect of driving all the itch cases away from this charity, and I have been four months collecting the meagre set of models which must serve to illustrate this lecture, and even for two of these I am indebted to the family of a compositor of the *Times* newspaper, that powerful organ which, by undeserved misrepresentations, had well nigh scattered my labours for the four last years to the winds; and thus, as it were crushed in the bud, an institution which I feel sure must ultimately grow into useful importance, either under the fostering care of my own or of abler hands.

I do not know that it is necessary to say more of the appearance of scabies than has been done already in the definition of the disease, and which is further exemplified by the casts. You will perceive that age and constitution very much modify the character of the eruption, and would scarcely think that one exciting cause could be the parent of such a varied offspring. I have attached the names adopted by Willan to the models, but you have already heard my opinion on that part of the subject, and I am sure you will act with practical wisdom in discarding whatever is attended with no practical result, whether advanced by a greater or less authority. Scabies has been considered a critical complaint; and its cure has been said to have been followed by bad consequences; I have never witnessed such an occurrence, though I have certainly seen good effects produced in visceral derangements by the counter-irritation afforded by the itch; and it is remarkable that in maniacal hypochondriasis, hysteria, and some nervous affections, it has occasionally seemed to me to effect a cure, after the Pharmacopœia has in vain poured forth its most approved formulæ.

With regard to the treatment of the itch, the cause being known, nothing can be more simple; for any substance which has the property of destroying insect life will cure the complaint: thus, covering the body with oil or grease of any kind, will have this effect, yet custom and experience have found that sulphur most effectually accomplishes the end in view, and this without irritating the skin; dilute sulphuric or sulphurous acid has also the same effect, and any of the mercurial salts in solution or substance. The sulphur fume-bath, iodine, camphor, &c., have the same properties; our great object is to choose such a remedy as shall destroy the acarus with the least possible irritation to the skin, and in the event of any complications with other cutaneous or internal diseases, to treat them appropriately, and according to general principles. Baths and washings are always necessary, and the beds, &c., should be fumigated with sulphur vapour, or subjected to the heat of boiling water for a considerable time.

I do not think it necessary to particularise the treatment of individual cases of itch, as it is so well known; but I will shortly mention the directions and remedies I am in the habit of giving.

I first commenced the treatment of itch on a large scale, seventeen years ago, at the Birmingham Town Infirmary, to which I was then elected the resident medical officer. This was an immense medical establishment for the indigent of the town and neighbourhood, upwards 17,000 in and out-patients being annually attended to. Soon after my election the itch was said to have overrun the wards, and on inspection I found ninety-four well marked cases, the males and females being nearly equally divided. Two wards were appropriated for these parties, and the necessary arrangements for subsequent purification of beds, linen, &c., were entered into. The treatment adopted was the exhibition of an acidulated solution of sulphate of magnesia every morning, and a smearing of the parts affected twice daily with an ointment, composed of levigated sulphur, soft soap, and water, in equal proportions.

In periods varying from three to ten days no trace of the complaint remained amongst any of the ninety-four patients, save the desquamation of the cuticle occasioned by the soap, and a few simple ulcerations which had followed some of the pustules in the worst cases. The wards were cleaned and whitewashed, and the bedding, &c., exposed to a high temperature, and the malady was eradicated. It often happens, in the cases that apply here, that whole families are attacked; this was the case in the instance of the *Times'* compositor, there were seven individuals affected—the father, mother, servant-girl, and four children.

A common acidulated aperient mixture was prescribed; *the most itchy places* were rubbed with an ointment composed of levigated sulphur and fresh lard in equal proportions, ten grains of the black sulphuret of mercury and three drops of creosote being added to each ounce of the ointment. A lotion was also ordered to be used warm all over the body, once or twice daily, containing a solution of creosote acidulated with sulphurous acid, and a warm bath for cleansing purposes once a-week. All the clothes were to be suspended in a closet containing a chafing-dish of burning charcoal, on which sulphur was to be thrown; and the beds were fumigated, with the same mineral, by means of a warming-pan containing a few coals, on which it had been projected; in three weeks these parties reported themselves quite free from the disease.

With respect to the itch of the inferior animals being communicated to man, I have little to say. In a few instances I have been enabled to trace it, and in one example, that of Mary Taylor, residing at Grey-court-place, Westminster, it was very obvious; the eruption was lichenous, minute papulæ, with much surrounding erythematous inflammation. This disease arose distinctly from sleeping with a mangy pet spaniel, and the disease was communicated to the husband. It yielded to the same treatment as that adopted for the itch in its usual forms; but the cure was more protracted. A few days since, Astley's Amphitheatre furnished another example of mange, which was contracted from a donkey, that became so tormented with the acari occasioning its disease, that it gnawed a large wound in its side, and was obliged to be killed. The man who rode this animal became affected, and his wife, I understand, is also a sufferer, as are some of the horses of the stud, their grooms and attendants, so that, unless a timely check is put upon this malady, it appears likely to be the source of considerable mischief and annoyance. I need not observe to you, that, in this instance, the acarus is probably that of the horse, for I should suppose the ass has not one to itself, though nature is so very prolific and bountiful in such matters, that even this is within the range of probability. I have no doubt, from former experience, that I shall not readily conquer this disease. It seems, after its apparent cure, very constantly to leave a pruriginous state of the skin behind it, which is not only very tormenting to the patient, but to the practitioner, for no remedies I have tried, save dilute mercurial ointment, seem to afford much benefit. I will endeavour to let you see this patient, with asinine mange, and you will, I think, at once perceive that a considerable distinction exists between it, and scabies in its ordinary forms; the eruption, as I have before said, is more minute, and more attendant inflammation is present. I shall not detain you longer to-day, though my glass is not quite run out, but proceed with the subject of acne next week; and you can, if you please, spend the short time that remains in inspecting, by the aid of the microscope, some of these wonders in the shape of parasitic animalcules of the human race. I must beg whilst you are doing so, that you will remember you are indebted to the labours of Mr. Quekett of the College of Surgeons, whose fame is European in this department, and who has most kindly and liberally obliged me on this occasion by the loan of some of the most beautiful specimens existing.

Quackery in France.—Sometime since a woman who watched geese in the territory of Serrigny, was bitten by a dog suspected of hydrophobia. Instead of immediately having recourse to excision and cauterisation, this unhappy woman applied to a quack in the neighbourhood of Nuits. The following method was pursued by the charlatan:—First, he made the patient write her name on a piece of paper. He then retired to his private chamber, and after the lapse of half an hour returned with a bolus composed of no one knows what ingredients, in which the paper with the woman's name on it was enclosed. He then told the woman to swallow the bolus *on the injured side*. This being done, he took a rod of the wood of St. Lucie, made two or three cabalistic signs on the left thigh of the patient, and then told her to put her hand on his shoulder. The moment she did so the operator trembled as though struck by undefinable dread, and seemed nearly fainting. At last he dismissed the credulous patient, telling her "her faith had saved her."

THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine, formerly Physician to the Bicêtre and Salpetrière Asylums, Author of the "Traité Medico-Philosophique sur l'Aliénation Mentale," "Medicine Clinique," "Nosographie Philosophique," &c. &c. Translated, with Notes, illustrative of some important Doctrines in Physiology, Phrenology, and Moral Education,

BY DR. COSTELLO,

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II.

HYSTERIA.

Hysteria is, in woman, an intermittent affection of the motility, produced by a morbid super-excitation of the genital apparatus and its nervous plexuses, and characterised by sudden loss of consciousness, general convulsions, and by the recollection of what has passed during the fit; the last symptom distinguishes it entirely from epilepsy.

Symptoms.—In examining the symptoms of this disease, there are two things to be observed; on the one hand, the nervous phenomena which show themselves during the usual course of life; and, on the other, the exasperation of these phenomena, which characterises the attack of hysteria, an attack more or less like an attack of epilepsy.

In the first case, the phenomena are infinitely varied, and are such as characterise any nervous disease in particular. Thus, as to the intellect, its exercise is rarely in the normal state in hysterical persons. These are generally remarkable for the exaltation of their passions. Their hatred is violent, or their friendship is ardent, and these opposite sentiments often succeed each other with rapidity, hysterical persons being usually very changeable in their affections.

The sensibility is also generally much exalted in hysterical persons. Sometimes, however, we see them present the opposite state, that is to say, anesthesia. Lastly, the sensibility may present a third modification, being perverted; and what we have said of the general sensibility may be applied equally to the senses of taste, smell, and vision, which may present these three modifications.

The disorder of the movements is considerable and its examination of importance. The disorders of nutrition are very numerous. Thus, gastralgia is a common affection in hysterical persons; they are frequently affected with obstinate vomitings, which do not yield to any remedy, yet some times cease suddenly.

The digestive organs present also a phenomenon which characterises hysteria, namely, the development of a great quantity of gas, which produces the state known by the name of tympanitis. In these circumstances, the belly may acquire a size equal to that presented at the ninth month of pregnancy. It is very remarkable that the belly may sink down without the gas being expelled by the mouth or rectum, when, of course, it must be absorbed. Others, on the contrary, eject a great quantity of insipid and inodorous gas. We see hysterical women continually tormented by a fatiguing eructation. In one young girl, the eructation lasted for months without ceasing a moment.

Hysterical persons have frequent palpitations of the heart, simulating an organic disease so perfectly as to deceive auscultation. The heart, in those circumstances, presents true convulsions.

The respiration is often disturbed in hysterical persons, and hence the frequent dyspnœa and suffocations.

The secretions are also modified, and the most characteristic of these modifications is in the secretion of urine which becomes thin and clear as spring-water. The cause of this modification is completely unknown.

All these these various symptoms of the hysterical are remarkable in their progress and in their inconstancy, one day one organ being influenced by the disease, another day another. I have seen the heart affected during entire months by a nervous pain.

We have now to examine a more peculiar phenomenon of this disease, which gives rise to a particular sensation known as the *globus hystericus*. In other nervous diseases we have observed, from time to time, its existence; but in hysteria it has a peculiar character. The point of origin of this globus may be from the epigastrium, the hypogastrium, or any other part of the abdomen, but always from the belly, and rising like the *aura epileptica* proceeds in every direction to the thorax, sometimes here, sometimes there, and stops in the œsophagus, where it produces the effect of strangulation. This sensation is so distinct that hysterical persons often say, "I feel a ball which traverses my chest, and mounts into my throat." There is, in the production of this phenomenon, something inexplicably curious. Some physicians have tried to account for it by a contraction of the fibres of the different muscles which this ball traverses, but this explanation is far from being demonstrable.[1] Besides, this ball may be felt at intervals or continuously. In some, it is supportable; in others, very painful. In some cases this sensation increases in intensity, and gives rise to the commencement of the attack.

Attacks of hysteria are constituted by symptoms variable, not only in intensity, but even in their nature. There have generally been three degrees admitted in attacks of hysteria.

In the first degree, which is very feeble, we observe the increase of the symptoms already stated. We remark yawnings, jactitations, crying and laughing without motive, and a convulsive motion of the face. By and bye, the respiration is impeded, the belly swells, the movements become automatic, the intelligence is weakened, the ideas are deranged, and at the same time the sensation of the hysteric ball appears. This state may last some minutes or many hours; sometimes the patient utters cries, and the attack being stopped here in some individuals, is terminated by an abundant flow of tears in some, and of urine in others. But at other times these symptoms are but the prelude to those which are to follow, and then begins another series of phenomena.

Second Degree.—The sensation of the hysterical ball becomes stronger, the face and neck swell, the respiration becomes more and more difficult, and is only effected from time to time by inspirations sometimes sudden and broken, sometimes long and profound. Piercing and very characteristic cries are heard; the patients fall and appear unconscious, though they often hear what passes around them. Then general or partial convulsive movements occur, altogether different from those of epilepsy. These are, in fact, violent and irregular contortions, sudden movements so energetic and violent that the strength of many persons does not suffice sometimes to hold the patients and prevent them from injuring themselves.

The third degree is characterised by unconsciousness, and the hysteria in this case approximates much to epilepsy. In this degree the skin may be stricken with general insensibility. The patients may also present the phenomena observed in catalepsy, or be affected with trismus and general tetanic motions. The resemblance of this third degree of hysteria to epilepsy has justly obtained for it the name of *epileptiform hysteria*. In this degree a paralysis more or less complete may occur and disappear at some indefinite time after the attack; this is one of the forms of palsy called nervous. The respiration may cease, the circulation be arrested, and the pulse be insensible; this is the last term of the attack. After a little time the functions are re-established.

The return of the attacks takes place at irregular intervals. It is especially at the menstrual periods that they show themselves most frequently, and in some hysterical persons it is always before, in others after, the menses.

The duration of hysteria is variable; it is rarely prolonged beyond the fortieth year.

It frequently produces disease of the heart, abdomen, or chest. When it has lasted a long time, it produces also so great an irritability of the nervous system that the slightest causes excite movements of impatience and palpitations of the heart, which sometimes produce fainting.

Death is rarely the termination of hysteria; but it may be hastened from the progress of the organic diseases to which the hysteria has given birth.

Treatment.—We must take into consideration rather the constitution of the individual and the prevailing symptoms than the hysteria itself. Thus, if we have to do with a plethoric individual, we ought to practise large sanguineous emissions. If, on the contrary, the patient be of feeble constitution, we must employ the opposite medication, giving ferruginous preparations and tonics. In individuals who do not present a predominance of either of these two temperaments, antispasmodics, such as either valerian, orange flower water, &c., are employed. It frequently happens that their employment modifies the disease.

During the attack of hysteria we must protect the patients from the dangers incurred from the violence of their convulsions. They must be kept in bed either by manual force or the strait-waiscoat. They should breathe fresh air; tight clothing and vestments should be removed from their bodies, and their heads should be placed in an elevated position. Cold water should be thrown upon the face, ether applied to the nose, and some drops of it poured into the mouth. In plethoric persons, and those who present symptoms of congestion, we must not hesitate to open a vein in the arm or foot.

Hygienic means should be largely employed in the treatment of this disease. We borrow from M. Foville the following passage on this subject:—"Exercise of the body ought to be considered as an excellent means of treatment; simple promenades, riding, swimming, sea-bathing, mineral waters, and travelling, should be recommended according to the seasons, and the fortune of the patient.

"Lastly, in the very frequent cases in which there already exists an hypertrophy of the heart in hysterical persons, or a commencement of it, or in which without hypertrophy, the activity of the heart is habitually excessive, digitalis often renders great service.

"A great variety of medicines have been extolled against hysteria; those which succeed the best, independently of cold enemata, are those which are adapted to regulate the motions of the body, while they procure for the mind an agreeable avocation; hence the utility of voyages, sea-bathing, and the watering places. It is unnecessary to say that the greatest precautions should be taken to remove moral impressions capable from their nature of stimulating the sensibility of the uterus, such as certain readings and theatrical representations. Most authors recommend marriage as a sovereign remedy for hysteria.

"Georget is opposed to other writers in this respect, and always from the same cause; but on the part of those who consider the uterus as the source of the symptoms of hysteria, and who have often seen after marriage the functions of this organ become regular, and the symptoms disappear, the recommendation of marriage is very rational. It is especially with plethoric girls that this succeeds; but it is necessary that they become mothers, and that they should suckle their own children. As to the hysterical persons, in whom the habitual suffering of the brain has produced a great exaltation of the sensibility of this organ, and in whom, at the same time, all the characters of an exalted nervous temperament exist, we are less certain of the effects of marriage; to these the recommendation requires great caution, whilst for others it is the most natural and efficacious remedy."

The seat of hysteria is sufficiently indicated by its name, which, however, we do not think perfectly correct; M. Foville has successfully refuted all the allegations of Georget, who, governed by a ruling idea, refers all diseases to the brain.

The genital apparatus of the woman, like that of man, has functions to fulfil; and when the social position, duties, or prejudices, oppose their accomplishment, these organs become the centre of cerebral reactions which produce reveries, involuntary weepings, sudden emotion without notice, redness, sudden paleness, symptoms trivial in comparison with those of confirmed hysteria, but which are, nevertheless, the first indication of it, and which all girls feel, more or less when they have attained their natural development.

The two following cases, which I have observed

[1] Quite as likely an explanation may be given by the supposed retrograde motion of the nervous fluid along the pneumogastric nerve.—TR.

at the Salpêtrière, are well calculated to give us an idea of hysteria and of its primitive seat:—

Amelia Martin, aged twenty-seven years, a fine young woman, of strong constitution, menstruated at sixteen, and has continued to do so regularly. Brought up with care, she quitted her village to relieve her parents, who were poor, and went to Paris to gain a livelihood. She was engaged as chamber-maid in a gentleman's family; up to the age of twenty-six her conduct was exemplary; at that period she suffered nervous symptoms, which she could not define: want of sleep, constrictions in the throat, suffocations, general numbness, and involuntary laughing and crying. A servant of the house fell sick; Martin was ordered to give her an enema; at the moment of administering it she felt something give way in her sexual parts, and she described herself as scalded and inundated with fluid; she remained in a swoon during an hour, and when she came to herself she felt everything changed.

She consulted many physicians, who all recommended marriage; this idea of marriage pursued her continually. Lastly, one day, goaded, said she, by an impulse which she could not define, she entered into the chamber of the coachman; she felt her eyes covered with mist, and her legs tremble under her; she said to him, "I deliver myself to you," and threw herself upon his bed. A pregnancy resulted; but what is most astonishing, that while in the arms of this man she did not feel any agreeable sensation; she soon began to be tormented by the idea of her fault, betook herself to an *officier de santé*, who procured an abortion at the period of four months and a half. Obliged to conceal from all the world her fault and its consequences, she travelled several leagues on foot the day of her abortion, suffered strong abdominal pains, and took little care of herself, she continued to attend to her occupations, though she felt very ill. A month after her ideas became sombre, and she went to confession; frightened by the remonstrances of the priest, she imagined she was going to die. Dismissed from her service, she went to live in a low lodging house, whence, in consequence of an attempt at suicide, she was brought to the Saltpêtrière, the 12th of December, 1834, in a state of profound melancholy, with despondence.

The eighth day she was more calm, and related her case to me, and made the admissions which I have reported; she wept with remorse, and could not conceive why she had so acted.

The same ideas of death and suicide pursued her continually; she refused to eat, persuaded that her soul was lost, and her features became greatly altered.

The 21st January, at five in the morning, she went from the sleeping apartment to the water-closet, descending the steps which led to the drying room, and suspended herself to the bannisters with a cord, of which she had an ample provision in her pocket; ten minutes had hardly elapsed when she was discovered, and though her body was still warm, it was impossible to restore her to life.

In this case, we have to remark, the reactions of the genital apparatus, which, having arrived at its full development in a modest young woman, aged twenty-six, became suddenly the focus of a seminal irruption and of a convulsive attack, at the moment in which this girl introduced the canula of the syringe, and which afterwards drove this unfortunate girl in spite of herself, her reason, and her principles, to commit a fault the remote consequences of which were suicide. But in this case, it was evidently the genital apparatus which was the first seat of the disease. I recollect that at the autopsy I found in her brain a disposition which I have never seen since; all the superior parts of the hemispheres were red, violently injected, and all the base of the brain, the grey substance as well as the white, was greenish and copper-coloured. Was this the effect of the strangulation or of the suicidal cerebritis?

The second case is that of a female named Bourg, who was brought to the Saltpêtrière the 3rd of January, 1835, in the most extravagant state of a violent mania; she tore and broke everything; her eyes were red, her face flushed, her discourses and cries incoherent; her hair was dishevelled, her clothes in tatters, her menses flowing abundantly. These symptoms, as was reported, had lasted during four days with the same intensity.

The fifth day she began to grow calm; the sixth day she spoke to herself, and the next day she gave me this account of her state.—

"I am married, but my husband has been absent during two years; I have a strong temperament, and it is his absence that is the cause of my illness, for I am pure in mind; but in me nature speaks, and it causes all my disease. I say this without any impure idea, but as a truth which I feel profoundly, and which makes me wretched."

Her father came to claim her some days after wards; he reported, in fact, that since the departure of her husband his daughter had been subject to frequent attacks of the nerves, and that the day before she was brought to the Saltpêtrière she had twenty attacks, one after the other, in consequence of which she became furious.

Certainly, if ever uterine reaction, or at least that of all the genital apparatus, was evident, it was in this case. In a woman otherwise reserved, but whom the orgasm and uterine super-excitation had thrown into hysteric convulsions, and even into the most violent fury.

Such examples demonstrate better than all reasoning where the primitive seat of hysteria is placed, and the source of the reactions which afterwards call into play the contractility of the nerves and cerebro-spinal centres.

But it may also happen that at length the genital super-excitation dissappears, and the convulsive attacks continue to be reproduced from the mere habit which the encephalic centre has contracted. This degeneration of habit is observed when examined closely, especially in vast reunions of hysterical persons, as in the Saltpêtrière; it may even be augmented by idleness, masturbation, and the fear of being sent away from the hospital. I have seen hysterical persons pretend to be taken with convulsive attacks the most violent, in order to be allowed a calming potion, or a pot of emulsion, or for the purpose of being touched and felt at their ease, or for the mere purpose of rendering themselves interesting; if they perceive that any person wishes to report their cases, then they will vie with each other to exhibit the most singular symptoms, and to utter the most incredible extravagancies. It is in the midst of these elements that the kind-hearted Georget collected his singular ideas on hysteria.

M. Foville explains in the following manner the hysterical symptoms:—"The uterus has nervous communications of two distinct orders. By its branches of ganglionary nerves, it communicates with the nervous apparatus of the lower belly, and with the viscera of this cavity. The unknown alteration of which it is the seat in hysteria, propagates to all these organs influences which they express by pains, contractions, and gaseous secretions; the tympanitis and the hysteric ball depend on some of these influences. Their extension to the semilunar ganglions may be the cause of the sensation of constriction, of stoppage felt in the neck, stomach, and chest. We can in this manner conceive the production of the symptoms of the non-convulsive power of the disease; we can quite as easily form an idea of the dependence in which the convulsions are found upon the disorder of the uterus."

Hysterical phenomena have their primitive seat in the genital apparatus, and especially in the nerves and nervous plexuses which proceed to it. This alteration of the nerves and plexuses can alone explain how we find in some men symptoms which seem identical with those of hysteria. I have seen, at the Bicêtre, a young man, aged twenty-two, who presented all the symptoms of the globus hystericus; he felt this globus ascend along the vertebral column, and threaten to suffocate him; he felt, as it were, the vapours, or a general nervous uneasiness, with swelling of the belly, suffocation, fleeting ideas, but without convulsions; he was almost always on the point of fainting, but without ever losing consciousness; his genital organs were little developed, he had not known a woman, he said; was of feeble constitution, of pale and feminine complexion, with no beard and little hair. I do not doubt but that there was* in him a lesion of the pelvic nerves or ganglions, analogous to the lesion which produces hysteria.

In the following case this lesion is still more evident, and the whole of the phenomena present an interest so much the more real, as the fact was communicated to me by an eye-witness, Dr. Fabre, then surgeon major of the regiment to which the officer belonged.

M. Regis, captain in the 31st regiment of the line, of tall stature and robust constitution, having the abdominal system developed, received in 1809, in Portugal, at Busaco, a ball which traversed obliquely from above down the abdomen, entering above the umbilicus, and issuing out under the last lumbar vertebra; having remained long on the field of battle, he was taken to the hospital at Coimbra, was made prisoner there, and transported to the English hulks. He succeeded in escaping in 1811, and rejoined his regiment at Valladolid. He had a dangerous intermittent fever on board the hulks, and in consequence of his wound, which terminated in the sixth month by a singular crisis, a sanguineous flowing from the penis, which lasted three days. From this time he was, like a woman, subject every month, periodically, to this kind of menstruation; if he suffered fatigue, or wanted food, from sudden attacks made by the guerillas, the menstrual flowing was suppressed, and the captain felt all the symptoms of amenorrhea, such as colic, heaviness of the loins, heat and pain in the hypogastric region, which only ceased when the menstruation appeared.

This state went on increasing till the month of December, 1812, the period at which the captain was sent to Navarreins, to the depot of the regiment. There he was ordered, by Dr. Fabre, hip baths and some applications of leeches, and a diluent regimen. the symptoms were complicated with convulsive attacks, which were renewed every month, two or three days before the sanguineous flowing. In these attacks the patient lost consciousness; there were convulsive motions of the limbs without stiffness, suffocation, delirium during which he saw sabres and batteries; slowness of the respiration, sometimes vomitings, which lasted about two hours, were renewed many times in the day, and only ceased on the appearance of the blood. To obtain this effect, the remedies which succeeded the best were infusion of arnica and enemata of assafœtida. During two years, Captain Regis was attended by Dr. Fabre for his hysterical attacks, and he passed, in 1814, as colonel in the service of Sardinia. We must admit that in this case, so interesting to science, the ball which traversed the abdomen must have injured, towards the lumbar region, the nerves and vessels which proceed to the organs of generation, and thus have produced by a mechanical effect, the hysterical symptoms so well characterised here. This case is almost wholly experimental physiology applied to the study of the seat of hysteria.

ORIGINAL CONTRIBUTIONS.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

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FIBROUS TUMOUR.

E. E., aged twenty-nine, single, white skin, grey eyes, black hair.

October 9, 1845. Complains of frequent desire to pass water, and difficulty in doing so, with constant pain in the centre of the pelvis, much increased at the catamenial periods; some gastric derangement. Health has always been delicate; the catamenia first appeared at the age of seventeen; they have generally been scanty, and dark-coloured; she has always suffered from dysmenorrhœa. Her present symptoms first appeared about eight months ago in the form of retention of urine and irritability of the bladder, which she has suffered from, ever since, with more or less pain in the uterine region, but there has been no discharge or hemorrhage.

Abdominal Examination.—A hardness can be

felt in the abdomen behind the symphysis pubis, but its form is not distinctly traceable.

Examination per Vaginam.—The os and cervix uteri are compressed against the symphysis pubis by a hard nodulated globular tumour, which is immoveable and occupies the upper part of the cavity of the pelvis.

October 28. Has continued in bed ever since, and the bowels have been regulated by simple medicine. Catamenia appeared on the 23rd profusely, and with great pain. She uses the catheter herself, but since the first report has not had occasion to use it so much.

Hirudines vj ori uteri.

November 10. Feels much better since the application of the leeches, and has not been compelled to use the catheter so often. Leeches are to be applied every week.

December 9. The uterine sound passes to the distance of four inches; its point can be felt above the symphysis pubis, where the hardness before alluded to is perceptible; pressure here moves the sound distinctly. She feels pain in the left hypogastrium. On pressing the uterus with the finger firmly upwards, the tumour seems to move somewhat. The os uteri is lower and more towards the centre of the pelvic cavity; the cervix is softer and more developed. Pt. hirudines.

20. Has been leeched three times since last report; the catamenia have also been present, and continued some time.

R. Pil. cambog. comp., Pil. hydrarg., āā gr. v, h. s. per tres noctes sumend.

R. Haust. rhæi c. magnes., ℥iss om. mane.

30. Feels better; the leech bites at the last application bled freely; the irritability of bladder and difficulty in passing water have not been so troublesome; the pain also is much less; when the catamenia were present she had severe pain.

Examination per Vaginam.—Cervix uteri longer and more developed; it is more in the centre of the pelvic cavity. Pt.

January 20, 1846. *Examination per Vaginam.*—Os uteri very much compressed; uterine sound enters with great difficulty, but then passes easily upwards and forwards to the extent of four inches, and can be felt in close contact with the parietes of the abdomen, above the symphysis pubis. Slight pressure at this part moves the handle of the sound distinctly, and is acutely painful.

R. Ung. hydrarg., ʒij; Ceræ albæ, ʒj. M. ft. unguent. ori uteri applicand.

Feb. 3. R. Liq. calcii chloridi, ♏ x; Infus. sennæ and Infus. gent. comp., āā ℥ss, ter die.

14. The ointment has been applied three times to the mouth and neck of the womb. She has been much easier and freer from pain since the commencement of this treatment. The pain is much less to-day. When the ointment is applied she has pain in the upper part of the back.

Rep. Mist. liq. calcii chloridi, et applicat. Ung. hydr.

March 24. *Examination per Vaginam.*—Os uteri not so forwards, but directed towards the left side. The cervix does not project, but lies along the mass. Uterine sound will not pass the os uteri internum. The tumour feels harder; its upper part is situated towards the right ilium.

Applic. ung. hydr. ori uteri. Pt. mist. ter die.

April 14. Catamenia appeared on the 10th, with the usual pain. The ointment had been applied the day before. Pt.

23. The tumour is now very low down in the pelvis, and pressing upon the perineum. It is painful to the touch. The uterine sound cannot be introduced further than the os uteri internum. I pressed up the tumour with much ease through the superior aperture of the pelvis into the abdominal avity.

May 1. Since the last report leeches have been applied once, and mercurial ointment several times, to the os uteri. The tumour is still above the brim, but can be readily pushed down into the pelvic cavity, and again returned without producing pain. The uterine sound will not pass. Pt.

29. The catamenia appeared on the 17th, with pain. The tumour at the time felt hard and solid above the pubes. I succeeded in passing the uterine sound on the 24th to the extent of at least three and a-half inches, after which a small catheter was introduced, and a minute quantity of melted mercurial ointment injected into the cavity of the uterus. She felt very ill for two days after, with acute pain at the lower part of the abdomen towards the right side, followed by throbbing. She had also pain of back, as after the application of the mercurial ointment to the os uteri, and some degree of fever. Feels better now; the urine passes much more freely; has not used the catheter for more than a month. Pt.

June 5. A larger catheter was introduced on the 2nd, and a larger quantity of mercurial ointment injected. She was seized shortly afterwards with pain of abdomen, followed by sickness and profuse perspirations. These symptoms lasted a few days, but have now nearly disappeared. Pt.

26. Eight leeches have been applied since last report, with great relief.

Examination per Vaginam.—Os and cervix uteri are more distinct. Gentle pressure on the abdomen brings the tumour into the cavity of the pelvis, and it is raised as easily by pressing it upwards per vaginam. The tumour, as felt through the abdomen, has decidedly diminished somewhat in size; it varies, however, considerably in size and hardness. Mercurial ointment was applied a day or two ago to the os uteri, which caused some pain afterwards. Pt.

Mist. chloridi calcii and Ung. hydr.

30. The mercurial ointment has been applied to the os uteri twice since the last report, and with much less pain of back; feels better. The tumour is distinctly smaller. Pt.

The earliest point of interest which presents itself during the treatment of this case is the marked improvement which resulted from the application of leeches to the tumour per vaginam; there was not only a considerable diminution in all her uncomfortable feelings, but she was able to evacuate the bladder with much greater ease. In the course of another month the tumour had become somewhat moveable, and had descended deeper into the pelvic cavity; the os uteri was lower down, being no longer pressed against the symphysis pubis, but situated near the centre of the pelvic cavity; the cervix also had increased in size, and was softer. These favourable symptoms continued to improve under the occasional application of leeches to the mass per vaginam, the more so as on one occasion the leech-bites had bled freely, although this circumstance appeared in no wise to interfere with the appearance of the catamenia. An examination with the uterine sound had been made in December, when it was found to pass to the extent of four inches, its point being felt through the abdominal parietes, just above the symphysis pubis, thus showing that the mass was connected chiefly with the posterior wall of the uterus. This was repeated in January with precisely the same result. Whether it was the result of swelling of the part or not I can scarcely say, but the os uteri had so much diminished as to be almost indistinguishable, the cervix having almost the form and character of a nodule springing from the lower part of the tumour. Much difficulty was experienced in passing the sound the second time, although when once introduced beyond the os uteri, it passed readily enough. At this period I began to apply mercurial ointment to the os uteri from time to time, and shortly afterwards put her on a course of muriate of lime, continuing the leeches occasionally.

Towards the end of March a considerable change was perceptible in the tumour. The os uteri was directed towards the left side, and the cervix, instead of projecting from the mass, appeared to lie along it. The tumour itself also felt harder, and not even with the greatest care could I succeed in introducing the sound into the uterine cavity; it would pass up to the os uteri internum, but no further; and whether this was owing to the canal of the cervix being much curved at this point or not, it is difficult to say, but from the direction of the cervix I am inclined to think it was. Was this alteration in the direction of the cervix, as also the impossibility now of introducing the sound, a result of the condensation of structure which appeared to be going on in the tumour in consequence of its diminished vascularity? There was no proof of its having increased in size, for hitherto the evidence had been distinctly in favour of an opposite conclusion. The mass as felt through the abdominal parietes and vagina was by no means tender, although it had latterly become harder and more compact, a result which seems to confirm the observations I ventured to offer on this subject at p. 40. After a continuance of the above treatment for a month longer, the still further diminution in the size of the tumour permitted it to descend quite down to the perineum, and I could raise it above the brim of the pelvis, and again push it down with the greatest ease. In a month from this time I succeeded in passing the sound into the uterine cavity, and injected a little melted mercurial ointment as in the former case. It caused severe pain of the back and a good deal of fever; a larger quantity was injected in a few days afterwards, producing, in addition to the pain, sickness and profuse perspirations. The difficulty in passing water has entirely disappeared. The tumour continues as moveable as before; the mercurial inunctions have been steadily continued, producing less pain, and since the report some more has been injected; and when the mass is raised above the brim of the pelvis so as to be grasped by the hand through the abdominal parietes, she feels convinced, as indeed every one does who has watched the progress of the case, that the tumour has diminished considerably.

COUP-DE-SOLEIL.

By John Alexander Morris, Esq.,

A healthy child, aged three, received on Thursday the 18th of June, a scald on the right side of the head, behind and immediately over the right ear. No unusual degree of local, and no constitutional irritation whatever, succeeded the injury, and the little patient presented himself daily to have the necessary soothing dressings applied, the healing process proceeding naturally. On the following Saturday, however, which was excessively hot, he remained for a considerable time exposed to the direct action of the sun's rays, without, I believe, any covering on the head, excepting the dressings, which only protected the injured parts. Early on Sunday he seemed to be a little indisposed, but not so much so as to attract the particular attention of his nurse. The character of his symptoms, however, momentarily assumed a more serious aspect, until about two o clock, p.m., when he was suddenly seized with a convulsive paroxysm, accompanied by vomiting of a greenish watery fluid; the convulsions after a little while subsided into slight, but almost continuous, alternate spasmodic rigidity and relaxation of the trunk and lower members, followed at a short interval by a sound emitted with extreme difficulty and in character somewhat between that of a sigh and a moan. Urine and fæces passed involuntarily; vision seemed to be completely abolished; the eyes were fixed, filmy, immovable, and insensible to the stimulus of light; pupils rather contracted; the jaws were firmly locked; the action of the heart imperceptible, while that of the carotid and temporal arteries was strong, full, quick, and impulsive; extremities quite cold; heat of body below the natural standard; the bronchial tubes were surcharged with mucus; and the little sufferer was evidently fast hastening to dissolution.

Such were the appearances the child presented when first seen by the medical attendant, about six o'clock. The most energetic measures were productive of no effect, and in about three-quarters of an hour afterwards the little patient died.

On post-mortem examination, the brain (the only organ examined) was found of increased volume, firmly adherent to, and evidently compressed with considerable force by, the cranium, and presenting in other respects the ordinary appearances found on inspection of the brains of those whose deaths have been caused by apoplexy; no effusion was found in the ventricles.

The case being made the subject of a coroner's inquiry, a medical opinion as to the cause of the death was, of course, demanded. This required more than ordinary deliberation, because the scald had been caused by the act of a girl, twelve or fourteen years of age, who wantonly poured hot water, the exact temperature of which could not be ascertained on the child's head. Could this of itself be suffi

cient to induce the apoplectic seizure? Or might it not be owing to the solar heat to which the child was exposed? Or was the effect to be attributed to the combined action of both, and if so, what was the exact share to be assigned to each? If no scald had been received, would the simple exposure to the sun's rays *have produced* the child's death? Might the scald *of itself* be the cause of death by a metastasis to the brain of the irritation of the scalded parts? On a correct knowledge only of these points can be founded a correspondingly accurate conception of the amount of guilt to be attached to the delinquent; of course, the intention of the act, and her knowledge or ignorance of its consequences, must also be held as determining for or against her. With these latter considerations, however, we have nothing to do. In my opinion, exposure to the solar heat should be considered as the chief cause of the child's death, and the influence of the scald, in contributing to such a result, as of minor importance. To this conclusion I have been directed by the consideration of the effects of the past unusually high temperature on many individuals, but particularly on children and young persons. In warm latitudes we may daily witness one of such effects, among many others, on infants, in the form of *trismus nascentium*—a disease of comparatively very rare occurrence in this climate, whereas during the late unusually hot weather I have seen two infants almost at the very same time fall victims to it. Evidences of the intensity of the heat also display themselves on adults in the forms of distressing headache, nausea, vomiting, diarrhœa, &c. It would not, therefore, in my opinion, be too presumptuous to infer that the principal agent in inducing the attack in the present instance was the same as that which produced analogous symptoms in others whose ages and constitutions must necessarily have enabled them to resist a power, which, to the feeble organisation of a child, was productive of fatal consequences.

WOUND OF THE ABDOMEN.

By George Bolster, Esq., Licentiate of the Royal College of Surgeons, Edinburgh.

Upon the night of Tuesday, April 7th, whilst assisting a gentleman at Newnham, I was sent for to visit Winter Guillam, of Little Dean, in the Forest of Dean, Gloucestershire, a thin, slight lad, of rather delicate constitution, aged fourteen. On arrival I found he had been quarrelling with a fellow workman, whilst engaged at his trade as a nailor, when he received a thrust from his antagonist with a red hot piece of iron, which he drew from the fire with the intention of pointing it; the wound was situated about the centre of an imaginary line, drawn from the anterior superior spinous process of the ileum, to the umbilicus, on the left side. The patient was ghastly pale, bedewed with a cold sweat, his pulse weak, and disposed to syncope; there was a considerable discharge of blood from the wound, which, *from its colour*, and its issuing *per saltum*, was evidently arterial, most probably from a wounded branch of the epigastric artery. The wound was a small round one, with ragged edges. From the weak state of the patient, I directly applied myself to arrest the hemorrhage, which I completely did, by applying a fine silk ligature to the bleeding vessel, with the aid of the tenaculum. I next approximated the lips of the wound as much as possible with an adhesive strap or two[1], applied cold water dressing, gave the patient a little wine, and left him for the night. Next morning, the 8th, patient slept during the night; no recurrence of the bleeding; bowels not having been opened for the three days previously. I ordered him an injection as follows:—

R. Ol. ricini, ℥vj; Mag. sulph., ℥ss; Infusi anthem. nob. flor., ℥v. M. fiat enema.

9. Bowels still unmoved; the wound much inflamed; the edges disposed to slough; tension and tenderness over the abdomen; acute and griping pains in the belly. Repetatur enema appl. hirudines, vj circum vulnus; warm fomentations and a linseed meal poultice over the abdomen.

10. Bowels unmoved; less pain; much the same as yesterday in other respects. To have no solid food of any sort. Continue the fomentation and poultice.

11. No motion from the bowels per anum, but a profuse discharge of well digested fæces from the wound; less pain and tenderness over the abdomen; complains of want of sleep. Continue the poultice. To have a draught with twenty drops of tinct. opii at bed-time.

12. Slept a little last night; discharge of fæces continues profuse. To have the following mixture.—

R. Confect. aromat. ʒij; Mist. cretæ, ℥vj; tinct. opii, ʒss. M. ft. mistura cujus capiat cochlearia ampla duo 4tis horis donec alvus duretur.

13, 14, 15, 16. No material change for better or worse; has vomited during the night this morning, causing great disturbance and uneasiness in the wound, and over the abdomen, with a profuse discharge of fluid fæces at each effort. To have a saline effervescing mixture with tinct. opii.

17. Vomiting checked; great lassitude; pain and tenderness about the wound and abdomen; discharge of fæces as profuse as ever. Repet. hirudines vj; warm fomentations to be constantly applied; repetatur mistura. To have the following pills:—

R. Pil. saponis c. opio, gr. iii; Hydrarg. cum creta, gr. ij. M. ft. pil. capiat, j omni nocte, mitte iv.

18, 19, 20. Less pain and tension of the abdomen, but has a frequent cough, which is very distressing to the patient, expelling the fluid fæces through the wound *per saltum* at each spasmodic effort. To have the following mixture:—

R. Mistur. amygdal., ℥iv; Vini antimon. ʒij; Tinct. digitalis, ʒij; Acid. hydrocyanic., m. x. M. ft. mist., capiat cochleare amplum urgente tussi, vel quater in die. Repet. pil iv.

28. Up to this period there has been little change either in the state or treatment of the patient; complains of pain in the abdomen, particularly in the pubic region, with inability to make water. Having fomented the part, I gently, yet firmly, pressed with my hand over the pubic region, when the urine flowed in a full and copious stream, which directly relieved all his uneasiness; cough less frequent. Repet. mist. c. pil., iv; repet. enema c. ol. ricini.

29. Complains the injection gave him much pain; passed a large quantity of hardened fæces by the natural passage; examined the discharge, and concluded it must have been in the rectum before the lad was wounded; this is the first time since the wound that he has had a motion per anum.

May 1. Considerably improved; wound looks healthy; edges disposed to granulate to a central point; less discharge of fæces through the wound. Omit the mixture. To have some beef-tea.

2. Slept well last night; less discharge from the wound; no pain.

3. Much the same; less discharge through the wound; no fæcal matter to-day. Habeat ol. ricini, ℥ss; Aq. cinnamomi, ℥ss. M. ft haustus statim sumendus.

4. Has had a copious stool (being the second since the commencement of his illness) per anum, in which were perceptible some apple pips, he having eaten some apple pie two days previously; it was now evident that the natural passage was restored.

5, 6, 7. Wound much less; discharge of a thin serous fluid, mixed with a little of the contents of the intestine; touched the edges of the wound with nitrate of silver.

8, 9, 10, 11. Wound nearly closed; no discharge of fœcal matter; bowels moderately open; no pain or tenderness in the wound, or over the abdomen. Apply water-dressing, slightly tepid, to the wound.

12, 13, 14, 15. Wound still open, but no discharge of fecal matter has occurred since the 9th ult. To have a saline aperient mixture. Continue the water-dressing, &c.

16. Bowels well moved; wound closed up. To have some mutton chop and beef-tea; has eaten an egg this morning. From this period up to Sunday, the 24th inst., he continued to improve in appetite, strength, and health, on which day he walked to church at Little Dean to return thanks, as is usual, for his unexpected recovery. The lad is now quite recovered, and works at his trade as before.

REMARKS.

The foregoing case is very interesting in a practical point of view; it clearly shows that Nature, the great medicatrix, when not rudely thwarted in her designs, but judiciously assisted by the medical attendant, as symptoms present themselves, is able to repair injuries of the most hopeless character, and when the patient's life is in the most alarming danger. Some beautiful remarks on this subject may be perused with advantage, in a small work by M. J. F. Bertrandi, "Dissertation sur le Traitemente de l'Anus contre Nature." In the present instance, the boy was wounded directly after he had partaken of a hearty meal, his supper, when the stomach and bowels were more or less distended with their contents, causing an unusual fulness of the abdomen. Throughout the treatment the strictest attention was paid to cleanliness, regularity, and absolute rest in the horizontal position; no solid food was given; farinaceous food, in the shape of puddings, pies, &c., with nutritious jellies and soups, were prepared, and liberally supplied, by some benevolent ladies of the place, who, acting the part of the good Samaritan, attended the patient all through his illness, and to whose attentions, together with the hand of Providence alone, may be attributed in a great degree the successful issue of this case.

Russell-street, Bedford-square,
June 27, 1846.

[1] We publish this case as we received it; we need not point out to our readers the uselessness of approximating the edges of a sloughing burn.—Ed.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS PANSON, Esq., of George's Hospital.

SURGICAL CASES.

Case III.

Cause of Traumatic Tetanus.

George Mason, aged forty-two, carman, admitted by Mr. Tatum.

Feb. 13. Countenance pale, rather anxious; pulse 98, small and weak; tongue moist; some difficulty in protruding it from his mouth; skin warm and moist; bowels open. Was admitted a fortnight ago, having sustained a compound comminuted fracture of the metacarpal bones of the first and second fingers. The comminuted and fractured portions of bone were removed at the time; healthy suppuration had taken place, and he seemed to be going on favourably until to-day, when it was found that foul suppuration had taken place in the wound, from which slight erysipelas was extending up the forearm. He complains much of a feeling of oppression, and says he has had some stiffness in the neck for the last two days. He is of a spare habit of body, and has experienced several illnesses.

R. Haust. cinchon., ℥j; Liq. ammon. acet., ℥ss ter die. Vin. rubri, ℥iv quotidie.

14. Pulse small and feeble; feet cold; countenance anxious; erysipelas not extending; rigidity of muscles of tongue and neck not greater than yesterday.

Sp. vin. gal., ℥iij.

17. Pulse 104, small and weak; erysipelas fading; much rigidity of the muscles of the jaw, preventing him from opening his mouth, except to a very slight extent. The muscles of the neck feel hard and tense. He has been making some slight exertion lately, and says he always finds the pain and stiffness increased after any movement. Perst. in remed.

19. There is now less stiffness about the neck, and he can move his head with less pain. He can also open his mouth with less difficulty; bowels costive; pulse small and weak. Perst. in remed.

Haust. sennæ, ℥ij statim.

21. He has had several exacerbations during the last few hours, and is now experiencing a very

severe one. The corners of his mouth are drawn back, exposing his teeth; nostrils dilated; eyeballs fixed and staring, and the forehead corrugated. The muscles of the neck are also in a state of rigid contraction. Pulse 108, wiry; bowels still costive.

R. Haust. morph. acet., ℨ iss 8vis horis. Enema terebinthinæ statim.

22. Exacerbations still very frequent; muscles of neck more rigid; bowels not well opened.

Ol. terebinth., ʒj; Mist. acaciæ, Haust. cetacei, āā ℨvj 8vis horis. Rep. enema.

23. One very fetid evacuation has been obtained; the attacks of spasm have not been so frequent, nor have they lasted so long. Rep. enema.

24. Copious fetid evacuations have been obtained. The attacks have not been more frequent. He is also able to speak better, and the muscles of the neck are more relaxed. Perst.

25. The attacks of spasm have now become much more frequent, occasioned even by a draught of cold air. He also complains of great uneasiness, and a sense of tightness at the epigastrium, with an acute pain darting from thence to the back. The muscles of the back are also affected, causing frequently slight opisthotonos. Rep. medicament.

26. Pulse 128, small and wiry; aspect livid, depressed; muscles of the neck much more rigid, pain and tightness at epigastrium continuing; has very great difficulty in swallowing, was nearly choked in trying to take a small æther draught, has had several tremors of the lower extremities. Omit haust. Rep. enema. Hirudines vj nuchæ.

27. Attacks of spasm continuing; muscles more rigidly contracted; is able to take very little nourishment; experiences much difficulty in breathing; profuse perspiration. Rep. enema.

28. Universal tremors of the limbs and hiccup; opisthotonos very frequent; profuse cold perspirations; pulse rapid and feeble.

March 1. Died early this morning.

SECTIO CADAVERIS TWENTY-SIX HOURS AFTER DEATH.

Cranium.—A small quantity of transparent fluid in the sub-arachnoid cellular tissue; the brain somewhat congested, both in the grey and white substance; ventricles not increased in size. The substance of the pons and medulla oblongata was of a pinkish colour, in streaks, but of its usual consistence.

Spinal Cord presented no cognisable abnormal appearance.

Thorax.—Old adhesions were found on the right side, uniting the lung to the corresponding walls of the chest. The lower lobes of both lungs were consolidated in patches of red hepatisation. Heart pale and flabby; muscular structure of the ventricles softer than natural, valves healthy.

Abdomen.—Liver healthy; spleen soft, and somewhat congested. Nothing remarkable observed about any part of the intestinal canal.

REMARKS.

Tetanus is a disease of the nervous system, consisting of a violent, long-continued, painful, and involuntary contraction—i. e., tonic spasm of the voluntary muscles in various parts of the body. The first symptoms generally observed are some uneasiness and stiffness about the muscles of the throat and jaws, making it difficult to move the head or open the mouth. Along with this the muscles of deglutition become affected, and after a short time the diaphragm is implicated, causing acute darting pain from the sternum to the back, and attended with aggravation of all the previous symptoms. The muscles of the back in most cases are implicated, so as to throw the body into an arch, forming the variety called opisthotonos. More rarely the body is bent forward, forming emprosthotonos. Still more rarely pleurosthotonos, or curvature to one side, is observed.

Although aggravations or exacerbations are constantly occurring, yet the muscles are never entirely relaxed from the spasmodic contraction; but continue so, with the exacerbations increasing in frequency until death. There is seldom much functional derangement, beyond costiveness, and a quick and feeble pulse. During the exacerbations profuse sweats break out, especially towards the termination of the complaint. The mind does not become affected.

The causes of tetanus are generally either sudden exposure to cold, or external injuries. The former is much more rare in this country than the latter, and comes under the province of the physician, though it often acts in conjunction with the injury to produce the disease. With respect to the kind of injury which is most likely to be followed by tetanus, nothing constant has been observed. The disease may follow any kind or extent of injury; it may come on at any time after the infliction, and while the wound is healthy or otherwise. Perhaps it most frequently follows punctured or lacerated wounds of the extremities, especially if many nerves are involved.

The pathology of tetanus is necessarily obscure, from the fact of its so often leaving no marks of its operation on the dead subject. From the latest investigations, and more especially those of Dr M. Hall, it would appear that it results from irritation of the spinal cord, or its afferent nerves. For instance, when an injury is sustained on the surface of the body, it is communicated by the afferent nerves to the spinal cord, the greater part or whole of which immediately responds to the sensation conveyed to it, by originating motion in the efferent or motor nerves, and thus arise the tetanic phenomena. Occasionally, however, irritation may arise primarily in the spinal marrow; and from the fact of small osseous plates being sometimes formed on the membranes, it was formerly thought that this was the exciting cause; now, however, it is believed to be merely a predisposing cause.

The symptoms in the present case did not come on until fourteen days after the accident, so it was naturally concluded, from what had been observed in other cases, that its progress would be slow. But the disease does sometimes come on and end in a surprisingly quick manner; the most rapid case on record is that of a negro, who scratched his thumb with a piece of broken china, and died in a quarter of an hour (Rees' Cyclopædia). It also generally runs its course more quickly in hot climates.

The first symptom observed was the change in the aspect of the wound, foul matter being poured out instead of the former healthy secretion, and the simultaneous occurrence of erysipelas. At the same time there was found some stiffness about the muscles of the neck, jaw, and tongue; these at first were only moderately contracted, and at intervals; but as the disease advanced, they became almost permanently contracted and rigid.

He experienced a difficulty in swallowing, and towards the end in breathing also, from spasm of the muscles of the pharynx and thorax. The occurrence of spasm of the diaphragm occasioned an increase of all his previous symptoms; this was soon followed by opisthotonos, or contraction of the muscles of the back; this did not proceed to the length it sometimes does, when the body becomes bent back in the form of a bow.

The pulse was rapid and feeble throughout, and did not display any hardness and fulness, as is sometimes observed in more acute cases. Towards the last it became more hurried and frequent, with profuse perspirations; and the patient died, worn out by the severity of the disease, combined in some measure with inability to take sufficient nourishment, and stoppage to the circulation, through the morbid action of the diaphragm and other muscles; the thorax being held as it were in a vice, by their spasmodic action.

The post-mortem appearances—as frequently happens in these cases—were most unsatisfactory. Nothing was found about the brain or spinal cord, which could account for the violent symptoms under which he laboured; there was merely some slight congestion in the brain, and a small quantity of fluid under the arachnoid membrane. There had been previous inflammation in the lungs, and their lining membrane; and the heart was found softer in structure than natural, giving evidence of a constitution weakened by previous disease or excesses, but not an effect of the fatal disease.

Hitherto, in fact, dissections, in the majority of cases, have failed to throw any light on the nature of the disorder; very often there is nothing found but slight inflammation about the mucous membrane of the pharynx, œsophagus, or stomach; or the pharynx and œsophagus may be contracted. Effusions are often found within the cranium; but these are only the effects, and not the cause of the disease.

Very often, before the occurrence of tetanus from injury, there is observed some twitching of the muscles during sleep; torpor of the intestines; an unnatural appearance of the wound, as a suppressed or vitiated discharge. The foul suppuration in the present instance must not be set down as the cause, but as the effect; for it happened at the same time as, and not before, the tetanus.

Tetanus can only be mistaken for poisoning by strychnine, or epilepsy. In the former case its symptoms are simulated so closely, that we can only arrive at a correct diagnosis by examining the history minutely, and taking into account other collateral circumstances. The latter disease is distinguished from it by the powers of sensation, and the intellects being impaired. Convulsion differs from tetanus, in there being distinct intervals of complete relaxation.

The treatment of this disease, as might be expected, is generally unsuccessful; indeed, as we are so much in the dark with respect to its proximate cause, it follows as a natural result that it should be so. The ancients considered traumatic tetanus as always mortal; now we do occasionally, though very rarely, see cases recover; therefore it is to be hoped that some slight improvement has been made in the treatment, but the great difficulty lies in mistaking cases of recovery for cases of cure, as has, in all probability, been frequently done.

Amputation of the injured limb has been resorted to, but has seldom been attended with a happy result. Division of the nerve of communication between the injured part and the spine, promises, from a past experience, to be a much more successful mode of treatment, and it is certainly a much less severe, and less hazardous operation. Baron Larrey obtained a successful result from it in one case, and Dr. Murray in another. But to give it a fair chance it should be performed early.

General blood-letting has seldom proved beneficial; indeed, inflammatory symptoms are very seldom present, except in some few cases, and quite at the outset. Local blood-letting is occasionally seen to relieve the spasm of any set of muscles.

The cold and warm bath have both had their advocates; but, indeed, they are generally found worse than useless. Sedatives have been naturally looked to, to lessen the symptoms, and to a certain extent they may be capable of that. We see daily that pain fortifies, as it were, the nervous system from the influence of sedatives, and accordingly immense doses of opium have been given, as much as one drachm every six hours, much more, in fact, than the stomach could digest, and immense quantities have been found in it after death. It is, at best, but an uncertain remedy, though from the nature of the disease it will probably always be resorted to.

From the weak state of the circulation, wine has often been had recourse to, and immense doses have sometimes been given, but, like opium, its effects are very unsatisfactory. Mercury is not sufficiently quick in the induction of its specific action to be of much use. Purgatives generally relieve the symptoms for a time; indeed, they are necessary, from the confined and loaded state of the bowels; but it is not proper to carry their action to a great extent, on account of the necessary movements increasing the spasms. Turpentine is the purgative which has given the most successful results. There is one case recorded (*Med. Chir. Trans.*, vol. vi, p. 65), in which an enema of turpentine *instantly* stopped the spasms, and the patient was not attacked again. This, however, is the only case of the kind published. Carbonate of iron has been tried by Dr. Elliotson, and sometimes found successful, but only in mild idiopathic cases.

Cannabis Indica has lately come into use; it is a most powerful sedative, and requires great caution in its administration; perhaps on further trials it may be found to be a valuable remedy wherewith to combat this terrible disorder.

A *combination* of sedatives, turpentine, and counter-irritation to the spine, have generally been found most successful in stopping the violence of the disorder.

On reviewing the effects of the above-mentioned treatment, it appears that we really know no medi

cine which is capable of *curing* tetanus; that all we can do is to endeavour to lessen the symptoms, and support nature, if it be possible, until the disease wears itself out.

In the present case, from the low and feeble state of the circulation, stimulants and tonics seemed necessary. As the bowels were found very much confined, turpentine was soon resorted to, and at the same time, from the increasing spasms, morphine was administered; this, in fact, is a better plan than giving solid opium, as its absorption into the system, in the liquid state, is more likely to be ensured. The morphine, however, did not afford much relief, and the bowels still continuing confined, turpentine was given by the mouth, and as soon as the intestinal canal was cleared of its offensive contents, an alleviation of the symptoms was observed; it was even thought, for a day or two, that the disease might be taking a favourable turn." The calm, however, was only insidious; the disease soon burst forth with renewed violence; it was found impossible to administer either medicine or nutriment, from the rigidity of the muscles of the jaw and pharynx, and the patient quickly sunk under the disease.

REVIEWS.

1. *Het Speeksel uit een Physiologisch, Diagnostisch en Therapeutisch Oogpunt beschouwd*, door S. Wright, Med. Doct., Eerste Geneesheer. aan de Algemeene Zieken-Inrigting te Birmingham, enz. Naar de Hoogduitsche Bearbeiding van Dr. S. Eckstein, vertaald en met Aanteekeningen voorzien door F. Riënderhoff, Officier van Gezondheid 3e. Klasse. 8° Amersfoort, 1816.

2. *Encyclopedisch Woordenboek der praktische Geneesmiddelleer*, naar der beste Bronnen en eigene veeljarige Ondervinding bewerkt door Dr. G. F. Most. Naar het Hoogduitsch. Te Amsterdam, 8°. 1843.

In accordance with the arrangement proposed in our last article upon this subject,[1] we now proceed to investigate the present, or at least modern, condition of the medical sciences in the more northern countries of Europe. HOLLAND, with the intellectual state and the institutions of which we are best acquainted, will form the exclusive subject of our present inquiry. Denmark, Sweden, and Russia, will supply materials for our third, and concluding, chapter.

Leyden, according to Dr. Otto, of whose correct and interesting account of the Medical Schools of Holland, we shall, in the present article, largely avail ourselves, still exhibits traces of its pristine splendour. The old University, which Boerhaave rendered so celebrated, and which imparts to the city a peculiar interest, is no longer what it once was. Few foreigners now resort to it. The number of students is ordinarily about one hundred and eighty; and, of these, sixty only are medical For the latter, a five-years' course of instruction is prescribed. Ere admission can be obtained to the colleges and hospitals, the student is subjected to an examination in chemistry, physics, and botany a competent knowledge of the Latin language is pre-supposed. In order to become a candidate for medicine, a second examination is requisite. This is publicly conducted, and in the Latin language. Previously, however, the attainments of the candidate are investigated by a "Tentator," who determines whether the candidate be duly qualified or not. This first examination continues, at most, three quarters of an hour. Thereupon, the candidate undergoes an examination for the doctor's degree; which is of longer duration. He must, then, get his dissertation, and thesis, printed, and deliver them to the Faculty. There are three different ways in which he is allowed to defend them: 1. *In auditorio minori*: This confers but little honour; as, in it, he is opposed by only two professors. 2. *In auditorio majori*: which is commonly preferred · in this, opposition may be offered by any of the auditory, as well as the professors: and 3. *More majorum*; after which the doctorate is conferred with all the accustomed solemnities of the ring, hat, and book. But this seldom takes place; the cause of which probably is the greater expence: for the candidate, after the first or second kind of disputation, is required to give only one banquet; and two, after the third.

The holidays last from July till September. In the Faculty of Medicine, there are only four professors these were, in 1820, Sandifort, the distinguished professor of anatomy and physiology; Kraus, a German, lecturer on materia medica; Dupuy,—on surgery and obstetrics; and Bernard,—on theoretical and practical medicine. Brüggmann was, formerly, lecturer on anatomy here: and it is universally acknowledged that this man, alike distinguished by his zeal, learning, eloquence, and amiable qualities, rendered the University of Leyden as efficient, and attracted to it as many students, as the illustrious Boerhaave, himself. The museums of anatomy and natural history have been deeply indebted to Brüggmann's exertions.

For a clinical institution, the University has erected a small hospital; which, at the period of Dr. Otto's visit, was, every morning, attended by Professor Bernard, a genuine physician of the Hippocratic School. The institution was managed, here, quite as in the German Universities. The patients were examined, and their medicines prescribed, by the students; who, afterwards, wrote down, at home, the history of each disease. The clinical, like all the other, lectures were delivered in the Latin language. For the surgical clinic, were reserved a few beds, visited by Professor Dupuy; but no lectures were delivered by him and operations, of very rare occurrence. Still more wretchedly was the study of obstetrics conducted. Three years were required to be devoted to it. In the first, the student was taught the theory of the science; in the second, under the title of "*Adjutor*," he was allowed to attend cases, as spectator and assistant; in the third, permitted as "*Actor*," to perform the functions of accoucheur, but only in natural labours, and, on no account, in those which required the employment of the forceps, turning, or other obstetric operation · and whole hours had, sometimes, been known to elapse, ere, in cases of difficulty, assistance for the unfortunate female could be procured. The several lectures were delivered, not in the University-building, but in the houses of the professors. The building itself is small but fine; the Disputation-hall, by no means, striking. The Senate-chamber, in which the examinations take place, was adorned by the portraits of all the former professors of the Leyden University.

Among the University-buildings is the large and beautiful Botanical Garden, with its five hot-houses or vineries. One part of this garden is named after Brüggmann; as having been laid out, and exclusively devoted, by him to the culture of medicinal plants. In the midst of a rose-hedge, stands the bust of the deceased professor. There was then, in Leyden, no special professor of botany. Lectures upon the science were delivered by Sandifort, a mere amateur. In the garden, was shewn a box-tree planted by the hand of the immortal Boerhaave.

The Civil Hospital, belonging to the University, is a small but fair edifice, distinguished, throughout, by a high degree of cleanliness. It, then, contained about forty beds, arranged in large or smaller wards. These beds were of wood; and, strange to say, their hangings "rather dirty."

The collections, possessed by the University were,

1. *The Anatomical Museum*, first established in 1616. It consists of a separate building; to which another, formerly used as an English church, has since been added. It was, altogether, a very fine and well-arranged collection. Part of the preparations were preserved in alcohol; part, spread out upon dishes. They consisted of valuable and interesting specimens of human and comparative anatomy, and there were some wax-preparations. All the various pieces were well-preserved and systematically arranged. There were, besides, a very large collection of the crania of all nations, and specimens of every form of disease which affects the osseous system; and, among these, some very striking specimens of osteosteatoma, especially one of the pelvis. To this museum, the students had free access. The principal defect was that, while general objects had been provided for, the special had been utterly neglected.

2. *The Natural-History Museum*.—This was perhaps, formerly one of the largest, of the kind, in Europe. Many of its preparations were the gift of Brüggmann. The collection had not, then, been put in order. A large and fine building had lately been erected for its reception. All the different objects composing it, had been set up in handsome cases, but without attention to systematic arrangement. There was, also, a very fine collection of the skeletons of various animals, a proportionately large number of specimens of *Mammifera*, with many birds and reptiles.* Macleod, a reputed German, was, at that period, director of the museum.

Such is the description of the University of Leyden, the once celebrated, and still principal, Medical School of Holland; as given by our distinguished friend and correspondent, Dr. Otto, of Copenhagen; who terminated his interesting scientific tour by a cursory visit to that country, a quarter of a century ago.[2] What progress has, since that period, been made, by the Dutch, in the science, or practice, of medicine, we are not now in a condition to decide. The only two productions of modern medical literature, in the Dutch language, which we have yet been able to procure, are those whose titles stand transcribed at the head of the present article. And these, be it remembered, are not original works, but translations from the German or "High-Dutch:"—a fact which, while indicating a laudable zeal for the acquirement and diffusion of medical knowledge, reflects little credit on the professional ambition, and talent for original observation, of the medical literati of Holland.

Most of our readers are, doubtless, aware that the admirable physiological and pathological essays, on the Saliva, by Dr. Wright of Birmingham, published, at first, in the *Lancet*, and, subsequently, continued in the *Medical Times*, have, some time since, been translated, although neither so ably nor so correctly as their literary, scientific, and practical value pre-eminently deserve, by Dr. Eckstein, of Vienna, into the German language.[3] Of that version, the

[1] See MEDICAL TIMES, vol. xiii, p. 419.

[2] *Reise durch die Schweiz, Italien, Frankreich, Grossbritannien, und Holland*, usw. von D. C. Otto, praktischem Arzte in Copenhagen, usw. Erster und Zweiter Theil. Hamburgh. 1825. They, who feel desirous of knowing how medical degrees were obtained, at Leyden, forty years previously to this period, will find an amusing account of the process, and of the doctor's visit to that once celebrated University, in Miss Aikin's *Memoir of Dr. Aikin*, vol. i, page 65.

[3] *Der Speichel in physiologischer, diagnostischer und therapeutischer Beziehung*, usw. nach Samuel Wright, M.D, &c. Mit einer Vorrede des Verfassers für diese deutsche Bearbeitung. Wien. 1844. Dr. Wright's Essays on the Saliva have, also, been noticed, and commented upon, with the most gratifying marks of approbation, in Canstatt's *Jahresbericht uber die Fortschritte der gesammten Medicin in allen Ländern*; Schmidt's *Jahrbucher der in- und ausländischen gesammten Medicin*; and Goeschen's *Jahresbericht uber die Fortschritte der gesammten in- und auslandischen Medicin*. From the *first* of these journals, we transcribe the following very interesting notice:—"In the saliva of a patient suffering from mercurial salivation, quicksilver has been infallibly demonstrated by Landerer. He, also, discovered quicksilver in the cortical substance of the brain, in the lungs, and liver, of a subject poisoned by sublimate,—bichloride of quicksilver. In the saliva of a horse, which had been, internally and externally, treated with sublimate, for a malignant exanthematous affection—Hautwurm of the *Germans*,—quicksilver was readily detected. The saliva, allowed to stand for a few days, became covered with a black powder; which, on admixture with water, sank to the bottom (of the containing vessel), and proved to be sulphuret of quicksilver." Canstatt's *Jahresbericht*, Dritter Band. Erstes Heft. S. 117. Dr. Wright has never yet, we believe, succeeded in detecting the presence of quicksilver in the saliva, or other fluid, or solid, of an animal to which it had been administered. The memorable philosopher, Dr. Spurzheim, it may not be irrelevant to remark, once assured the writer of this article

work which stands, first announced, at the head of our present article, is a *Dutch* translation; executed by a general practitioner of medicine,—Officier van Gezondheid,—named Rienderhoff. It is, in our opinion, deeply to be regretted that this gentleman did not, instead of employing an incorrect German version, recur, at once, to the original papers. To copy from a copy, when access can be had to the original, is an error, as sedulously to be avoided in science, as in the arts. Yet, due allowance made for the disadvantages under which the Dutch translator obviously laboured, he really seems to have performed his task in a very creditable manner, and even to have avoided some of the more glaring blunders into which his German predecessor has been betrayed. It will be, also, seen, in the following transcript from the commencement of the work, which we give as a specimen of its execution, that the text has been occasionally illustrated with notes by the learned scribe of Amersfoort.

"FIRST PART."

"*On the Saliva in the healthy state.*—By the term, *Saliva* (Speeksel), is understood the animal fluid, naturally secreted by the sub-lingual, sub-maxillary, and parotid glands," (de ondertong-onderkaaks- en oorspeekselklieren.) To this sentence belongs the ensuing paragraph, introduced, as a foot-note, by the Dutch translator :—"In our larger domestic animals, there exist, in addition to the above-named salivary glands, the *molar glands* (baktands-speekselklieren): and we find, in the carnivorous *Mammifera*, yet a fifth gland; termed the *orbital* (oogspeekselklier,) and situated in the orbit (ooghohte)."

"By the older physicians, this fluid was, for the most part, regarded as an excrementitious matter, and the terms, saliva and sputum, indiscriminately applied to it. Yet that, in the present state of science, it may more correctly be considered as a peculiar secretion, is clearly shewn by its containing sulpho-cyanogen and ptyaline (zwavelblaauwstof en speekselstof). Nevertheless, as, in certain morbid conditions, both of these ingredients may be wanting, we may concur with Wedelius and Diemerbroek, in distinguishing between the two fluids, from their respective sources. Thus, the term, *saliva*, will be exclusively restricted to the product of the salivary apparatus while *sputum* is used to designate the fluid secreted by the mucous glands of the mouth, throat, bronchi, and lungs. Yet is this distinction not scientifically correct. For whenever, in any secretion, a peculiar constituent constantly occurs, it should be regarded as essential to that secretion, and as the principal or sole agent in its physiological action. And when, in consequence of a morbid condition, these peculiar constituents are not found in the secretion, such a change in the secretion may be inferred, as will require a denomination more consistent with its actual character and composition. In the course of this treatise, several varieties of diseased saliva will be noticed; which, as regards their quality and composition, ought rather to be looked upon as excrementitious matters than as fluids contributory to digestion and assimilation. Yet, the retention of the term, *saliva*, will be excused, as well on account of the source from which these matters are supplied, as because the proposed work admits of no other arrangement."

The preceding specimen, which we have, as closely as possible, translated from the Dutch,—itself an almost literal translation from the German—will, on comparison with the original paper in the Lancet,[4] shew how greatly the latter has been condensed, or, in our opinion, mutilated. We shall conclude this part of our subject with the confident prediction that, wherever the scientific literature of England be read, the enlightened labours of Dr. Wright, of Birmingham, on Sialography, will find their way; and with the expression of our sanguine hope that we shall, ere long, hail their introduction into the other languages of Europe under better auspices, and a more faithful guidance, than those of Dr. Eckstein, of Vienna.

that he could always detect in the brain of persons, who had been repeatedly subjected to mercurial salivation, a peculiar flaccidity of structure, distinctly appreciable by the touch.

[4] Vol. i, for 1842, page 782.

The second work, at the head of this article, is the *Dutch* translation, in two octavo volumes, of an excellent "*Encyclopædia of General Pharmacology;*" originally published, in the German language, by Dr. G. F. Most, of Rostock; author we believe, of a very valuable and elaborate *Encyclopædia of Medicine and Surgery;*[5] a copy of which we fortunately possess, and shall, ere long, introduce to the notice of our readers. The German original of the General Pharmacology, we have not yet seen; but the Dutch translation bears evident marks of having been executed with extreme care, talent, and fidelity. The following article, transcribed, at random, from page 78—79 of the first volume, will afford a favourable specimen of the style and matter of the work, while the exhibition of a few of the Dutch scientific terms, introduced here, as in our translation of Dr. Wright's paper, will serve to amuse, if it do not edify, the curious reader:—

"The acetic acid,—acidum aceticum,—concentratum, acetum radicale, alcohol aceti—Azijnzuur[6] (of the *Dutch*), is as transparent as water; and exhales a penetrating and excitant odour. Its specific gravity is 1050—1060. Its adulteration with sulphuric acid (zwavelzuur) may be detected by the acetate of barytes (azijnzuure Zwaaraarde);—with hydrochloric acid (zoutzuur), by acetate of silver; with lead, by hydrosulphuretted water. Diluted with three parts of water, it may be employed as (common) vinegar. The acetic acid is, without doubt, the best remedy to apply to the nostrils (rickmiddel), in the syncope and stupor consequent upon external injuries. The aromatic vinegar, of which it forms the (principal) ingredient, is, in these cases, equally efficacious. The acetic acid is employed, also, for the dispersion of warts and condylomata; and Carmichael recommends it for the cure of corns. In the first stage of hospital-gangrene (Hospitaalversterving) when the pain and inflammation have disappeared, Werneck applies dossils of lint, wet with the acid (to the diseased part) three times a-day and, in a state of dilution, it has lately been eulogized, by Rust, as an eye-water, in asthenic ophthalmy (asthenische Oogontsteking). In the application of sinapisms, the object will be more speedily attained, if the skin have been previously moistened with acetic acid. In poisoning with opium, acetic acid, administered in doses of forty or fifty drops (for an adult) in a glass of water, every five, ten, or fifteen minutes, *after the evacuation of the poison*, is the most effectual antidote."

Thus concludes our brief and imperfect sketch of the modern state of medical education and literature in HOLLAND. Our sense of its manifold deficiencies is, however somewhat relieved by the hope that, ere long, we may be enabled to pourtray, from personal observation, to the readers of the MEDICAL TIMES, the actual condition of medicine, and the natural sciences,[7] in a country over which the name of the illustrious Boerhaave still sheds an undying splendour, and on which the zoological labours of the veteran Temminck, alone, will suffice to confer celebrity or respect, in the eyes of all the more enlightened naturalists of both hemispheres.

[5] *Encyklopädie der gesammten medicinishen und chirurgischen Praxis. usw. Erster und zweiter Band. Leipzig*, 1836.

[6] Acide acétique, of the *French;* acido acetico, of the *Italian*, and *Spanish;* Essigsäure, Essiggeist, and Essigalkohol, of the *German* language.

[7] For an account of the state of the natural sciences in *Holland*, see *Reports on the Progress of Zoology and Botany*, 1841—1842; published by the Ray-Society.

A medical man in the south of France has recently been condemned to pay a fine of ten francs for refusing to give assistance to two poor persons who had been severely wounded. The ground of this person's refusal was a want of means of payment on the part of the injured persons.

BOARD OF HEALTH.—It has just been stated that the Commission of Sanatory Inquiry will be rendered permanent by the appointment of a Board of Health to suggest and enforce precautionary measures against the visitation of the cholera.

TO CORRESPONDENTS.

To An Advertiser *in particular, and to all advertisers in general:*—The Lancet *is defunct as an advertising medium. Messrs. Simpkin and Marshall, who, before the change in the shape of that journal, took between* 1000 *and* 1500 *copies a week, now take less than* 325. *Messrs. Longman, who used to take over* 1000 *copies, now take* 200. *There is something peculiarly frightful in the rapid downfall of a journal that once enjoyed a very tolerable circulation. The* Medical Times *delivers from its own office at least the double of the whole circulation of the Lancet. Gentlemen wishing to form a notion of the amount of copies sent out by us weekly, should present themselves at our office on a Friday evening at a quarter after four o'clock.*

A Pupil *who writes concerning the attacks made on the Westminster Hospital School by Mr. Hale Thompson, should have sent us his name.*

A Subscriber.—*In the present state of the law there is no means of preventing a member of the Society of Apothecaries or indeed any other person from assuming the title of surgeon. His being correctly entitled to the appellation is quite another matter.*

Cymon.—*No hospital fees are required to obtain admission as a student in the Parisian hospitals. Our correspondent has only to present his diploma from a college of surgeons to be allowed free attendance on all lectures and hospitals; in case of his not carrying his diploma, his passport, in which he is described as a surgeon, will be sufficient. Dissections are not generally permitted during certain summer months, the subjects being given up for courses of operative surgery; dissections are very constantly practised, however, under the guise of operative courses, the fee at the Ecole de Medecine being, we believe,* 25 *francs, whilst that at the other anatomical school, a much cleaner and more convenient establishment, amounts, we think, to* 35 *francs for a course of one month's duration.* Cymon *may, if he please, live very cheaply in the French capital.*

We regret exceedingly that Mr. Mitchell should have had the trouble of writing to complain that his number of the Medical Times *failed to arrive. The fault is not in our office, as by the system of sending the papers it is next to impossible for any subscriber's number to be omitted. The increased number of papers transmitted through the post in the present age of journalism has caused a great increase in the post-office labours, which has only been partially met by employing more sorters. Hence, we imagine, the omission arises of which our correspondent complains*

A Weekly Reader.—*Much may be done by educational means, and much by the sufferer's own efforts.*

Mr. Jackson's *views have been before published in this journal.*

Mr. Clerk.—*Mr. Curling may be seen at the London Hospital.*

Mr. A. Hanning.—*A person with a double qualification is eligible to the appointment. But the Apothecaries' Society would not therefore be precluded from a prosecution.*

A Subscriber *cannot legally practise pharmacy in England without the license of the Apothecaries Society. The Society, however, do not* now *prosecute any practitioners with regular qualifications.*

H. T.—*The work of Teste, which is translated, is the customary work consulted on mesmerism. The Zoist is published quarterly. We do not know the price.*

Mr. Self's *letter shall be noticed in an early number.*

M. A.—*The physiological works of Swedenborg have been translated and published by Newbery in Holborn, and Bailliere, in Regent-street.*

A Pupil.—Burdois *is not living. He was born 14th Sep.,* 1754, *and died ten years ago. He was one of the first that joined the French Academy of Medicine. We do not know his successor.*

F.—*The notice of Dr. Hall's mistakes on Doctorship is too long for the importance of the subject.*

Mr. H. H. *is thanked for the invitation, which we are obliged, however, to decline.*

Mr. Cautrel *has obligingly sent us a correspondence with the Poor-Law Commissioners illustrative of a very scurvy payment for very considerable professional services. The pre-occupation of our columns precludes the publication; but we may probably have very shortly to recur to the facts.*

Authors who have addressed us on the subject of their books, are informed that they shall not be overlooked.

Several letters have been received on the case of Mr. Bernard, on the position of the Pharmaceutical Society, and on the unenviable position in which a clique in the Royal Society is placed by Mr. Hunt's recent letter. We shall make some selections in our next number.

A Student.—*We shall be obliged by the details of the proposed appointment of an apothecary to University College Hospital.*

M.D.—*We have not overlooked the case. We shall attend to it when we procure all the details.*

Mr. F.'s *cases of poisoning are not sufficiently condensed for our pages.*

Mr. K., *whose cases are declined, is informed that we do not like to be a mere puffing circular of very indifferent practice.*

Chirurgus.—*We hope to find room in an early number for the strictures on Mr. Holmes Coote's exposé of Mr. Lawrence's hospital practice.*

J. H., *with more caution and moderation of tone, will be acceptable. "T—— S—— versus good English" is too personal for admission.*

A Subscriber, Manchester.—*We do not know of any in the English language. The best view of Marshall Hall's discoveries is to be found in the works of Prochaska. Some men are known by their associates, others by their predecessors; Dr. M. Hall by both.*

The case of Cholera by Mr. Hoblyn, the paper by Mr. Close, with several other practical cases, in our next.

Several communications have been received, some of which shall appear in our next number.

THE MEDICAL TIMES.

SATURDAY JULY 11, 1846.

Non hic Centauros, non Gorgonas, Harpyiasque,
Invenies; hominem pagina nostra sapit.—MARTIAL.

IN our last article, on the public injustice of which medical men are too frequently the subjects, we contrasted the chances of success, reputation, and recompense in our profession with other such chances in the army. We proved, that, by good luck and good conduct, many a man has risen from the ranks to title and fortune—we endeavoured to find an instance of a poor man amongst ourselves being thus rewarded for his skill and bravery, and we could not point to a single name upon which the honours had descended. Home ventured the opinion, that,

> A wise physician, skilled our wounds to heal,
> Is more than armies to the public weal;

but government gratitude in this country has never proved the truth of the assertion! The chance in the two situations, again, for men who have a little ready money for investment, are greatly in disfavour of physic. Let us look at it in illustration.

MEDICUS was an orphan, with two thousand pounds at his disposal. He had left school, and fixing upon medicine as his future profession, forthwith became an alumnus of a respectable university. Accustomed to good society at home, he kept it at college, and without being either extravagant or dissipated, he yet chose to maintain and deport himself as became the son of a man who had formerly gained high honours in the same seat of learning. He was above the average of his compeers in talent, and with a laudable desire to add to the lustre of his father's name, and give himself a status as a scholar and a man of science, he applied with earnest industry and perseverance to the pursuit of the knowledge which chiefly concerned him. He succeeded beyond his hopes, ambitious though he was, and the highest honours of his university were his glorious reward.

His education completed, the remnant of his patrimony sufficed to put him in the position of a practitioner, and maintain him for twelve months. He cheerfully risked it, never doubting that his labours would be requited, and that his college reputation, and acknowledged skill, would soon secure for him a good income. At the end of a year, his stock was exhausted—his patients nominal—hope of success in his present enterprise abandoned him—and through the influence of a friend, he obtained an assistant-surgeoncy in the army.

MILLS, also an orphan, was left with precisely a similar amount of capital. He had no head for learning, but he was practical philosopher enough not to let the absence of such a commodity cause him any trouble. Little money had hitherto been expended on his education, and he knew himself too well to conceive it worth his while to bestow any more. Besides, the fate of his friend MEDICUS warned him, that, if the one, with splendid talents, and high intellectual ambition, failed of success in physic, the other, with no such perquisites of nature about him, could hardly expect to make much advance. MILLS, again, loved money—the material and the affection for it were both legacies from his father—and he did not choose to part with it, risking its return. The lad had pride in him, though, and longed for a name and a station of respectability. He saw poor MEDICUS without a farthing in his pocket, save what came in the shape of pay, and yet of some consequence from the position he held. He calculated what Medicus had lost in his tedious, painful, march, to his present position; and, preferring for himself a shorter cut, bought a commission with a sum considerably less than his friend's education had cost him; appropriated the remainder judiciously, and enjoyed himself with what interest it brought.

Neither man was of much consequence, but it was easy to see which was the humbler of the two—the gentleman, the genius by birth, the scholar by education, the unfortunate through no fault who had *begged* an asylum in the army—or his opposite in all things, who had *bought* a title and a station, which enabled him to patronise with his notice his dependent friend.

This is no fanciful sketch—it is one of those pitiable truths that are stranger than fiction—and is only one of many that might be related from the pages of our professional history.

Is the profession of medicine and surgery less important to the nation than that of soldiery? Is it of less consequence to us to protect the lives of our citizens, than to destroy the lives of our enemies? Does it signify less to preserve health and prosperity at home, than to promote disease and discord abroad? For the continuance and integrity of our army are not the soundness and strength of our civilians necessary? Without our medical men, would our military be provided in a state of health, and rescued from states of disease? To these, and to scores of such-like questions, an emphatic answer in our favour would only be the emphasis of truth. Wherefore, as we share in the trouble, may we not share in the triumph? Of equal usefulness, why are we not equally rewarded? Gross must be the injustice which allows only a niggard recompense to fall into the lap of the deserving—and grosser still is that which requites one meriting object at the expense of another.

A certain servitude in the army obtains for a man elevation of rank, or retiring pension, or both. This is regardless of war, wounds, and such like. For the attainment of the distinction, it may happen that the fortunate individual has nothing to do but obey common commands; keep his hours as regularly; himself as sober, clean, and erect; his sword as bright; and his gloves as well pipe-clayed as he can. For doing these things, he is well-paid while he is at them, and well-pensioned when he has done. And glorious work we call it.

Now, it occurs to us, as a common sense suggestion that a similar veteran in our own ranks, who gets no retiring pay, quite as well deserves it. A poor parish surgeon, slaves away the best portion of his life in an attendance on the sick poor of his neighbourhood, at a recompense that does little more than keep his horse. Say he pursues this galley-slave sort of life for twenty or thirty years—does he not at the end of that time deserve some recompense for what he has done? As a government servant, and not a jot less respectable than most of his companions in servitude, does he not deserve to be pensioned as well as any of them? He has been harder worked, worse paid, and more despised, than most, though he has had the painful and responsible duty of mixing with, and endeavouring to mitigate, the sorrows and sufferings of his fellow-creatures. Does he not, when the day of his old age comes, deserve to be cherished and sustained equally with the man, who, for one and twenty years has had little else to do but curl his moustache and pipe-clay his breeches? No, says the government, he has worked as long as he can in our cause—pay him his wages to the last farthing—he has no further claim upon us! Bounteous, considerate, legislators!

Suppose the poor fellow sickens in the service we speak of—who ministers to, and maintains him? Not those whom he has served, and in whose occupation he has lost his health and strength. If he have any ready money at command, he may live on that—if his pockets be empty, he may go to the parish. There is not even an hospital provided for him, as there is for the common soldier temporarily disabled for duty.

Suppose he be injured for life in the cause he has been serving—what then? *Similia similibus curantur* is all the sympathy he gets—they advise him to try the old work again in the hope that its exercise will strengthen him. If he plead incapacity, they say more's the pity—if he tell them he is poor, they eloquently discourse on their inability to help him. The workhouse may shelter him till his grave is ready—his retiring perquisite is—

> To look around,
> And choose his ground,
> And take his rest!

Oh! many have been the veterans amongst us, who have done their country a goodly service, in years of hard, ill-requited labour; who have sacrificed their health and strength in the fulfilment of their duties; who have suffered destitution in their declining years, and would have gladly found an asylum like that of Greenwich or Chelsea; but no pensioner's favour was allotted to them—they sorrowed, and suffered, and died—and that was all!

So much for our poorer brethren. Alas! the patricians amongst us fare no better. A physician, or surgeon, profoundly educated, and of excellent skill, fulfils the onerous duties of an hospital-

officer for twenty, or twice twenty, years. Wh can say what service, often at his own risk, tha man may have rendered in that space of time —what the sufferings lessened—what the live saved—what the good done! And, at the close of his servitude, what does he get? A vote o thanks from the committee, and their regret tha he is leaving! Now, in all common justice, doe not the man deserve more than this? If he b allowed no pay during the time of his servitud does he deserve no honour at its close? Why there no title of distinction instituted by Govern ment, as a retiring reward for men who have thus well and faithfully served the country and it subjects? Is not one of this class, who has spen a heavy sum upon his education, and bestowe the fruits of that education in generosity, as mucl entitled to "half-pay," after certain servitude as another, who, expending no more upon his commission, gets well kept during his probation and well pensioned afterwards? We think mos honest men will say so.

What has been done for those of us, who, in th very thickest of the battle-field, have stood amongst the wounded, to save or succour them? Nothing! Absolutely nothing! Idle, accidenta circumstances, will make a field-marshal of one man who never let off a gun in his life, excep to slay a tom-tit; whilst the intrepid, dextrous surgeon, the foremost where the havoc and carnage of war are, is overlooked, despite his bravery, and the service of his skill. What was done by Guthrie, and what has been done for him? Proud may he be that his country is his obligant, and to a generous heart the reward may be enough. But has such man been rewarded as became him? Would not France have laurelled such a name, and been glad of the opportunity? The man who, foremost in the fights (and they were not few he witnessed), disregarded himself that he might serve his suffering fellows, has no honours or trophies laid before him—except in th gratification of his own conscience, after all the proudest, purest, recompense of duty—and th estimation of his professional brethren, Mr. Guthrie is utterly unrewarded for his brilliant, bountiful services. And this in a country boasting its generosity and justice. What was the fate of Charles Bell? For all he did as one of the first anatomists and physiologists of the age, and one of the surgeons of Waterloo, he was dubbed with a dirty knighthood worth no gentleman's acceptance, and left to starve upon his celebrity. If a broken heart be a possibility, Charles Bell died of one. His only legacy was to his widow—it was "the memory of his gentle virtues, and the honour of his name!" This was all that bountiful England enabled one of her wisest and best subjects to bestow!

THE PHARMACEUTICAL BILL.

The Pharmaceutical Bill, which came out a few weeks since as one of the best of Mr. Jacob Bell's preparations, has not belied the author's well-established repute. It has turned out a failure with the customary magic rapidity. As usual, the work when put forward as complete was just half done; in other words, it was just fifty per cent. the worse for having been touched; and, as a natural result, it had no sooner got clear of the legislative mortar than it had to return for fresh trituration. The important fact is communicated to us by Mr. Bell himself. "The publication," he says, "of the Bill has been delayed during the reconsideration of some of the clauses which were not altogether satisfactory." We admire the *naive* confession, find no difficulty in believing that the clauses were not "*altogether* satisfactory;" and we cannot but applaud the simplicity of the mind editorial, which thinks it meet to announce that the Bill is not published *during* the deliberations which have yet to decide what the bill shall be. The druggist body may be very avid for the collegiate pill preparing; but they are not to swallow it until it be actually in existence! We earnestly hope they will not! Perhaps, even then, it may be quite as well avoided. We have a fancy that its results will be anything but commensurate with its price; and that through its agency many a well-meaning, simple-minded druggist will be purged of his gold without finding his body politic one whit the better for it. But of what avail this warning? In public schemes man, in the mass is as prone to be deceived as man in the individual is inclined to deceive. Society in each of its great divisions, is for ever revealing itself a *tremendous gobe-mouche*. There is hardly one section of the public without its bubble of the day. The world may have its South Sea scheme, or Foreign Mine Speculation, or Railway Mania for a season, and then have done with the calamity for ever; but among the *classes* of the social community, such things on some smaller scale are produced and reproduced on the public stage in endless succession; each tribe having always in view some chimera, for ever near yet for ever distant, like the unapproachable horizon; a chimera by which they "never are—but always to be blest."

But, perhaps, of all bubble-mongers who have at once aroused and falsified the expectations of their credulous followers, the least prepossessing, the least dazzling of specimens, is Mr. Jacob Bell. From what we have seen of his lucubrations, which have something of an eternity of tediousness in their ceaseless iterations, as free of rational beginning as they are incontestibly of any satisfactory end,—that well-meaning gentleman might think for a century without eliciting an original conception, and write for half-a-dozen without an idea that would be mistaken for genius. The would-be regenerator of druggistry, might be an ages-wonder as trade's best impersonation of "common place." That ambitious laborator of constitutions for a large section of the community, fancies that his adoption of a truism makes it a discovery,—gravely legislates for a public as though medicine were a *tabula rasa;* and systematically offers himself to his followers as though it were a principle that the largest confidence on the gravest matters were to be secured by exhibiting the smallest competency. To him a hand at legislation is an easier thing than one at cards; he would essay the healing of the state politic of medicine with more readiness and zeal than the constipation of a counter customer. And then—fortunate fate of short-sighted pertinacity—there are druggists who mistake their oracle's superior dulness for elevated sobriety, his common-place fantasies for acute common sense—his thoughtless innovatorship for inventive genius! Truly the world is not so bad a heritage for the weakest mind if free of a faint heart!" To daring incapacity there wait rich trophies in the bounteous hands of a very abundant folly!

We are almost ashamed to speak seriously of this much vaunted scheme of a National College of Pharmacy. There is something in the end itself—something in its projectors—something in the means employed and proposed—that set at defiance the gravity of even the philosophical. Do we want pharmacy taught? For what was the Society of Apothecaries incorporated? Why their endowments? Wherefore their immense pharmaceutical appliances? The whole basis of their important establishment is pharmacy, and a scheme is gravely proposed by Mr. Jacob Bell and Mr. Morson, and Mr. Savory and Mr. *Pigeon* (?)—the modest representatives of English scientific pharmacy in the year 1846, by which this old National Institution—the most powerful medical body in the kingdom—shall be stripped of its great fundamental privilege, and quietly, with all its funds and endowments, put uselessly on the legislative shelf!

The thing is almost too preposterous to have a second thought. The head of British pharmacy is incontestibly the Society of Apothecaries; and if ever there is to be a state enactment for pharmaceutical education, it is as clear as a mathematical axiom that the enactment will be based solely and wholly on the funds, endowments, laboratories, corporate privileges, and scientific appliances of the existing institution.

But there are negotiations, we are told, with the College of Physicians. Interviews, it is true, have taken place, but we rejoice to say, that though the fact itself is unfortunate and to be deplored as lending a nominal sanction to what is too clearly an associated bubble, yet that the results themselves leave no room for apprehension. The president and censors have *seen* the druggist representatives, but that fact augurs to those who know the gentlemen no very extraordinary results. We have seen them too; and hence write we as we do. The College of Physicians is governed by its Fellows, and we are in a condition to say that these gentlemen will set their faces strongly against the delusion. They wish as we do—to see the Pharmaceutical body rise in education and social influence, but feel with us that it is under no such leadership as that typified by Mr. Jacob Bell that those great objects can be attained. The idea, therefore, of a mixed body of examiners is just simply absurd: the physicians will never lend themselves to the arrangement, and the scheme will perish in its puny birth.

TRANSACTIONS OF LEARNED SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Meeting of June 23rd, 1846.

William F. Chambers, K.G.H., M.D., F.R.S. President, in the Chair.

Case of Strangulation of the Ileum in an Aperture in the Mesentery. By John Snow, M.D.

The subject of this case was a lady, aged twenty-four. When in the eighth month of pregnancy, she was seized with severe pain in the belly, of an intermitting character, with sickness and vomiting. She thought labour was coming on, but there was no dilatation of the os uteri. The symptoms throughout her illness were those usually arising from some mechanical obstruction in the bowels, and, in spite of all the remedies employed, they continued with more or less severity until her death, which took place on the fourth day.

An examination of the body was made twenty-four hours after death, and the morbid appearances are fully detailed. On examining the preparation which was on the table, the vermiform appendix is found inclosed within a double layer of peritoneum, which forms a kind of broad ligament, which is

Is there no mistake? Is not this gentleman one—not of the few rulers, but of the many *ruled*?

attached above to the cæcum and ileum, and externally and inferiorly to the iliac fossa and brim of the pelvis. On the outer side of the vermiform appendix, there is an aperture in this membrane, with defined edges, through which the thumb can be passed, and behind the portion of it, which extends with a curve from the appendix to the ileum, there is a pouch into which a finger can be passed for about two inches. The thin membrane passing across from the vermiform appendix to the ileum, and leaving the aperture, through which the strangulation took place, forms an extension of the above-named curve.

The author remarks, there are many cases on record of strangulation of the bowel, from adhesion of the vermiform appendix with neighbouring parts; but the appearance of the membrane in this case, the absence of evidence of old inflammation, and the circumstance that the membranous band appears to be a natural continuation of a larger fold, leads him to conside it as a congenital production of peritoneum, leaving an aperture on the inner side of the appendix vermiformis, similar to the one seen on its outer side.

On a Luminous Appearance of the Human Eye, and its application to the Detection of Disease of the Retina. By William Cumming, late House-surgeon to the London Hospital.

The author mentions the well known luminous appearance of the eyes of cats, dogs, and other animals, the reflection from the eyes of albinoes, &c.; and after quoting from the works of Muller, Bur, and Tyrrell, as to other cases in which reflections have been observed from the posterior part of the human eye, proceeds to say that the object of the present paper is to show that the healthy human eye is equally, or nearly equally, as luminous as the eye of the cat, &c., when observed under favourable circumstances, and the application of the alteration or loss of this luminous appearance to the detection of changes in the retina or posterior part of the eye. The author states that the reflection may be seen in the following manner:—Let the person whose eye is to be examined be placed at the distance of ten or twelve feet from a gas or other bright light. The rays of light must fall directly in his face, all rays jutting laterally off the head must be intercepted by screens placed half way between the light and the eye examined. If the reflection be bright, it will be at once seen from any spot between the light and the screen.

The author, having more particularly described the mode in which the observations brought forward in this paper were made, remarks the luminous appearance varies from a dingy red to a bright [illegible] or golden tint, in some cases of extreme lustre equalling that of a well ignited coal. It is more brilliant when seen at a distance of several feet. It was always seen when the eye was healthy and the pupil easily dilated. The reflection was seen in cases in which the lens had been removed by the operation of solution.

Twenty cases were examined indiscriminately, vision being perfect in all; the age varying from a few months to sixty years. In sixteen cases the reflection was bright and very evident; in four faint, and seen with more difficulty; and in one it was not seen. As to the cause of this reflection, it is attempted to be shown that the retina, although a perfectly transparent medium in the living eye, is still a reflecting body. The formation of images upon the retina, the reflection from the cornea and lens, and other transparent bodies, are cited as proofs of this. Other circumstances would increase the brilliancy of retinal reflection—viz., the concave shape of the retina itself, the position of the lens, the influence of the vascular anterior layer of the retina filled with red globules of blood.

The author remarks, that the establishment of the fact of a similar reflection from the healthy human eye to that from the eyes of other animals appears important in two ways:—First, as a physiological fact it shows that too much influence has been ascribed to the tapetum, that of the retina being entirely overlooked. Secondly, in a pathological view. The existence of this appearance in the healthy eye having been recognised, its non-existence, or alteration, may enable us to detect changes in the condition of the retina and posterior part of the eye heretofore unknown, or satisfactorily to see those which we only suspected.

In confirmation of the value of this appearance as an aid in the detection of diseases of the eye five cases are related by the author.

A Case in which there was Congenital Deficiency of the Left Kidney, and in which Death was caused by Granular Degeneration of the existing Kidney. By G. Busk, F.R.C.S.E., and Surgeon to the Seaman's Hospital.

The subject of the case was a gentleman, who died on the 16th of May, 1846, in his twenty-seventh year. He had enjoyed good health till within three years of his decease, when he became ailing and looked ill and bloated, but was well enough to continue his pursuits, and to take tolerably active exercise up to last Christmas. In March he was affected with dropsy and albuminuria, with frequent epistaxis and general disturbance of all the functions.

The under side of the tongue and the inside of the cheeks and lips became gangrenous befo[re] death; the body exhaling a strong, fetid, urinous [o]dour. The secretion of urine, however, continued [t]o the amount of a pint and a-half in the twenty-four hours, up to the day of his death. The left kidney and supra-renal capsule were entirely wanting; the ureter on that side was very small, and was inserted in the usual place into the bladder, and terminated about six inches from that viscus, in a cæcal extremity. The right kidney was corrugated and very small, the capsule closely adherent. The form otherwise normal. The substance condensed, firm, and waxy, and marked on a section with white puncta and striæ. Microscopic examination showed no oil, but partial obliteration apparently of the tubular and vascular structure, and in other parts a deposit in the tubuli uriniferi of an opaque, minutely granular matter, soluble in acetic acid, and presumed to be of an albuminous nature.

The author remarked that the case presented an instance of complete deficiency of one kidney, without corresponding increase in size or alteration of shape of the existing one, which was apparently even below the natural size; and he observed that the diseased condition there present, and the consequent albuminuria, was not owing to the deposition of oily matter in the tubuli uriniferi or substance of the gland, but to a pathological change analogous to that which produces cirrhosis in the liver, or as it may be supposed to an adhesive inflammation of the tubuli uriniferi, and probably of the venous capillaries of the gland—a condition, in his opinion, more common as the cause of chronic albuminuria, and the other symptoms produced by what is termed granular kidney, than that in which a superabundant quantity of oil is found in the tubuli uriniferi. And he stated his belief that, in all cases where there was an undue deposit of oil in the kidney, the liver would be found diseased, and that the secretion of oil by the kidney, as in other cases that of bile—takes place by the vicarious action of that gland supplying the defective power of the

Case of Abscess in the Neck, communicating with the Aorta by an Ulcerated Opening. By George Busk, F.R.C.S.E., and Surgeon to the Seaman's Hospital.

The subject of the case was a woman, aged thirty-five, who died on the 3rd of June, 1846. An abscess had formed in the neck, anteriorly, which burst spontaneously, about five months before her death; and had continued to discharge white purulent matter through a small funnel-shaped fistulous opening in the hollow immediately above the upper edge of the sternum, and in the mesial line. On the morning of the 1st of June, hemorrhage of arterial blood took place, and recurred in the evening, on the compress being removed. The blood welled up, with indistinct intermissions, and was readily stayed by pressure. The hemorrhage recurred more violently on the following afternoon, and on being stayed by compress the cavity of the abscess became filled with blood, and then communicated the feeling of diffused pulsation like that of an aneurism. The woman sank and died about forty-eight hours from the first appearance of the hemorrhage. Post-mortem examination displayed a large old abscess occupying the front of the neck below the larynx, and extending behind the sternum, to the right side of the arch of the aorta, and a lateral extension of it passed between the right bronchus and arteria innominata to the spine, but the bone was not diseased. The external cellular coats of the aorta where that vessel entered into the formation of the wall of the abscess, and also of the arteria innominata, were entirely removed, and the middle fibrous tunic exposed, so that its structure was quite evident for a considerable space. In the centre of this portion of the aorta was a small lacerated opening, about a quarter of an inch in length. This opening penetrated the middle and internal tunics of the vessel, and the edges of the rent were sharp, and a little ragged, and immediately around the opening the internal surface of the aorta was slightly roughened by the deposition of lymph. A similar roughening was present on the inner surface of the arteria innominata opposite the portion deprived of its external coat, and much thinned.

The author remarks that the points of interest in the case appeared to be the length of time (forty-eight hours) after the commencement of the bleeding from the aorta before death was caused.

The fact of the perforation of a large arterial trunk by ulcerative action proceeding from without, and the circumstance of the abscess assuming the pulsating character of an aneurismal tumour, when distended with fluid blood; a character which was previously entirely wanting.

On the Intimate Structure of the Human Kidney, and on the Changes which its several component parts undergo in "Bright's Disease." By Joseph Toynbee, F.R.S., Senior Surgeon to the St. George's and St. James' General Dispensary.

This paper contains the result of the author's researches into the structure and into the nature of Bright's disease of the kidney since the year 1838; during between two and three years, he was engaged in pursuing investigations in conjunction with Dr. Bright, but as a variety of circumstances prevented the publication of a work, the result of their joint labours, the author details here the principal facts which have been made out. Feeling how much is due to the assistance and co-operation of Dr. Bright, at whose expense the greater part of the extended series of drawings elucidating the paper were made, the author states that it is not without some degree of diffidence that he prefixes his name above to the communication.

In the division of the paper on the *Anatomy of the Kidney*, the author successively describes minutely the result of his examination into the parenchyma, the tubuli uriniferi, the arteries, veins, and nerves of the organ, in each of which departments views are advanced, varying considerably from those of modern and former anatomists.

In the pathological observations, the author adheres to the opinion originally advanced by Dr. Bright, and lately so ably advocated by Dr. G. Robinson, that a congestive condition of the organ precedes the important changes which subsequently occur in the three stages of disease. The author then proceeds to demonstrate that the arteries first become diseased, and that the tubuli, veins, and parenchyma of the organ follow. The three stages of the disease are illustrated by an elaborate series of drawings, in which the various successive changes are indicated, and the paper concludes by pointing to the various plans which should be carried out for the prevention of this disease, at present so formidable to all classes of society.

Dr. Williams apologised for offering observations at so late an hour, and, while he congratulated the Society, expressed his regret that so many papers had been read on one evening, each of them giving ample scope for an evening's discussion. He would confine his observations to the pathological points of the last paper only. On these points he would express his dissent from Mr. Toynbee's views, as well as from those contained in Mr Johnson's paper, read at the first meeting of the Society for the session. Both these gentlemen appeared to have decided that the elements of the disease in

Bright's kidney consist of a fatty deposit, though neither of them proved it. Dr. Williams could not consider fatty deposit to be an essential part of the disease at all. He believed that fatty matter is seen in varied proportions, but not in greater amount in Bright's disease than in any other kind of degeneration, that of the liver for instance. Dr. Richard Quain, the house-physician to University College Hospital, had made a series of careful observations, from which it would appear that the deposit in this disease is not confined to the uriniferous tubes, but appears on their exterior in the interstices between the vessels. This corresponded with the views which Dr. Williams had long held and published, viz., that the deposit consists of albuminous matter like that effused from vessels affected with inflammation or a certain amount of congestion, and that it may, like such fibrinous effusions, present considerable varieties in its mechanical and chemical conditions. This deposit mostly consists of granular matter; but the granules in one case are contained in cells, resembling exudation corpuscles rather than the proper epithelium cells of the uriniferous tubes, and are seen without the tubes as well as within them, and therefore cannot be a multiplication of these cells The distinction might be further seen on contrasting a healthy kidney with one diseased; but he observed, a perfectly healthy kidney in the dead body in this metropolis was rare. A change of structure, the extreme of which constitutes Bright's disease, is in slight degrees exhibited in a large majority of the kidneys of adults examined in hospitals. But, on contrasting the healthy kidney of a young subject, its beautifully regular, oval, nucleated, epithelial cells, present an appearance quite different from the large round granular cells which stuff the tubes, and block up the parenchyma in the early stages of Bright's disease. This stuffing and obstructing interrupt the function of the kidney, and eventually alter its structure. In the more advanced forms of the disease, the granular matter is seen without its cell walls, and sometimes interwoven with filamentous tissue. The facts Dr. Williams would adduce against the notion, that the deposit is of a fatty nature, are derived from its optical and chemical properties. Although occasionally fat globules in considerable numbers may be seen in it, this is an exception rather than the rule. The granular matter, in most instances, is far less refractive than oil globules are; such, for example, as are commonly seen in the cells of the liver, as may be made obvious by comparing them in the same field. The chemical reaction of the matter also differs from that of fat, for the granules resist the action of caustic potash and of æther, separate or combined, whereas acetic acid partially dissolves them, a fact mentioned in the abstract of Mr. Busk's valuable paper read that night. Dr. Williams was aware that Mr. Gulliver and others believe that the molecular base of all nucleated cells is of a fatty nature, but that was a subject foreign to the question, whether or not the morbid deposit in Bright's disease is chiefly fat, like that in fatty degeneration of the liver. This question he would answer in the negative, and conclude by the additional argument, that it is by no means low in specific gravity.

MISCELLANEOUS CORRESPONDENCE.

NEWSPAPER AUTHORITY.

(To the Editor of the Medical Times

SIR.—I did not much like your correspondent, Mr. Hunt, until he corresponded with you. I now feel that I must—nolens volens—love the man for the signal services he has done the medical community by the disclosures in his letter of the other day.

First, we have a perfect clue to the alleged successes of the throat mutilator of Sackville street, Mr. Yearsley. This daring gentleman (ten times the worse *because* he writes himself an M.R.C.S.E) trumps up a certificate from a *brother-in-law*, in order to gull the public into trusting their throats and purses to his tender mercies. But this is a small affair; such miserable fry as this are scarcely worth the ink I use in tracing their names.

But Mr. Hunt has, *secondly*, without intending it at all, given the explanation of the outrageously personal and abusive articles in the *Lancet* on the subject of the royal medal. Mr. Hunt tells us that one Dr. Tyler Smith is leader-writer for that most corrupt journal, which seems to delight, while making its *final* flickers (for it *is* expiring), in casting as evil a light on every thing around it as possible. Now this same Dr. Tyler Smith is one of Dr. M. Hall's most grovelling toadies! *Hinc illæ lachrymæ!* Hence the absurd praises of that intimate friend of the defunct and pilfered Prochaska. Hence the attempts to make the question wear a *general* and not an *individual* character, by hawking in the names of poor dear Dr. Grant, and Dr. Lee of Golden-square; all this was a mere feint, a case to enable the high-minded Dr. Smith to express his honest opinion of the small friend and inheritor of Prochaska. Ye gods, how necessary it is to know who pulls the strings, if one wants to understand the puppet-show of every day life! But for this opportune letter of Mr. Hunt I might have gone to the grave under the belief that Wakley was the author of the late tirades. It is true that I fancied he must have lost the only valuable qualities he was ever thought to possess—common sense and cunning—but I did not care for that. By the bye, as I have mentioned the name of the coroner of spotless purity, might I enquire of him, why his man of all work, Dr. Smith, omits all mention of the name of Mr. Kiernan among the awarders of the medal to Mr. Busk, when it is notorious that the said Mr. Kiernan did take an active part in the said award? Does not Mr. Kiernan rejoice in the friendship of the immaculate coroner? And is it not a touching sight to behold this former friendship playing the graceful part of Ægis to the reputation of a man, who if report speaks true, has stuck like a trump to the editor of the *Lancet* in some of his most unfortunate fixes.

I am, Sir,
Very much yours,
DEMOCRITUS.

THE TRIAL?

[To the Editor of the Medical Times.]

MR. EDITOR,—Is it not monstrous, perhaps approaching the ridiculous, that when questions of vital importance to the interests of the public, as well as the respectability of the medical profession, are discussed in a court of law, or elsewhere, men who rank as seniors in it, and whose opinions must have weight *with non-medical persons*, should come forward, and upon their *sacred oath*, declare "that a dislocation is not a dislocation," "that a deformity is no deformity," and "that, with a partial anchylosis, a man may be as active and as useful a member of society as before!" I must confess, Sir, that to me this reasoning is unintelligible, and I should recommend those gentlemen who make use of it to study a different system of ethics *that, perhaps*, which teaches men *their duty*, and the reasons of it. Philosophy may do much, but *honesty* will do more, to counteract those feelings of self-interest which too often actuate the minds of all men. I regret to observe, *and I speak it advisedly*, that amongst the consulting surgeons, and more particularly those who have shown *their fallibility*, and rendered themselves notorious, there has long been a tendency to brow-beat, and treat with contempt the opinions of the general practitioner, though those opinions are based on sound reasoning and modern enlightened argument. This must cease, or the noble science they espouse will be degraded and injured!

My intention for addressing you on the present occasion is to request the favour of you to lay before the profession a trial which took place on the 27th ult., in the Court of Queen's Bench, "Farrer v. Wildbore." As an observer, I was forcibly reminded of the passage—"Who can decide when doctors disagree?" The contradictory evidence offered by some of the medical witnesses assumed the most jaundiced hue, Mr. Liston observing "that a deformity in the limb was a test of good surgery"—"that it frequently occurred under the best treatment" (which is wrong), and "that no arm could have been treated better, or with a more successful issue, than the plaintiff's; because this is stated by Mr. Liston, and *he* chooses to be guilty of bad surgery, is no reason why the more scientific, though humble men in the profession should follow his example, and although Mr. Bransby Cooper has fallen into the same misfortune (as witness Dr. Edwards who was in court), and had been treated by Mr. Cooper, *with the same result*, under precisely the same accident as the plaintiff's, this is no argument *with surgeons*, that with proper skill and care the arm might not have been free from deformity, and as useful as before. It is well-known, Mr. Editor, that some men render themselves conspicuous by good deeds, others notorious by the contrary!

The arm of the plaintiff was fractured obliquely at its lower end, on which accident Dupuytren, Samuel Cooper, and other eminent and honourable characters, thus observe:—"In setting fractured radius, the head must be inclined to the ulnar side of the forearm, and when the fracture is towards the wrist, the hand and lower fragments have a tendency to displacement outwards towards the radial side of the forearm. *If attention be not paid to prevent this*, the union takes place with deformity, and the motions of pronation and supination are imperfect." The whole case rests on this, and I must say it was evident that sufficient attention was not paid in the present instance, and I am surprised that men of reputation can expose themselves to the remarks of the profession and the public, knowing as they must that in all cases where deformity does take place under this accident, it can be accounted for on scientific principles.—See Dupuytren's Clin. Chir., t. iv, p. 214.

The evidence offered by Mr. Gill, surgeon, of Islington, and Mr. Merritt, of Leadenhall-street, was honest and straightforward, and will tend to raise them in the estimation of their reflecting brother practitioners; it was the truth, the whole truth, and nothing but the truth! although the tide was against them.

The plaintiff suffers in person and in pocket, has become a bankrupt in mind and circumstances, reckless of consequences at the injustice which emanates from the *laws* and science of this country. Courts of law are not, in my opinion, the proper tribunal for appeals of this nature, nor are juries calculated to form a correct estimate of the skill and diligence necessary. Mr. Jervis (the counsel for the defence) may be a tolerable medico-legal examiner, but it is evident that he is no surgeon, and a worse anatomist.

I am, Sir,
Your old Correspondent and Subscriber,
MEDICUS.

(To the Editor of the Medical Times.)

SIR,—I beg through the medium of your valuable paper, to call the attention of the profession to the present lamentably neglected state of the Chelsea Botanical Gardens—truly they are a disgrace to the Apothecaries' Company, and what *would* and *ought* to be a real blessing to the students is an absolute curse The labels are so deranged that what you would suppose to be horse-radish, would turn out to be *fox-glove*, or some such an *innocent herb*." Surely, there are persons enough employed in the gardens to keep them in order, and it would not in the least *detract* from the *honour* and *dignity* of "the worshipful company" to keep them in a state fit for the advancement of the study of botany, thereby carrying out the intention of their great founder.

I remain, Sir, your obedient servant,
DISCIPULUS SCIENTIÆ HERBARUM.
Charing-cross, July 7th, 1846.

ADHESION OF WOUNDED PARTS.

[To the Editor of the Medical Times.]

A butcher in Clare-market, whilst chopping some meat, cut off a considerable portion of the index-finger of his left hand with the instrument. The blow was directed nearly parallel to the finger, not at a right angle, so that one-half of the nail, and about an inch of the end of the member were chopped off. The bone, fortunately, just escaped injury. He came to the hospital with the wound bleeding, but without the severed portion. I asked

him if he knew where it was, and whether he could get it, as I wished to make him as sound a finger as he had before He sent for it to his shop, and in a short time it was brought, and after washing it and the wound with warm water, I placed the severed part as accurately as possible upon the bleeding surface, and retained it there with straps of adhesive plaster. A week afterwards the parts were accurately united, but the patient had some numbness in the part. I saw this man to-day—a month after the accident—and he has now a good finger, sensibility being quite restored.

H. Smith.

House-surgeon to King's College Hospital July 7, 1846.

GOSSIP OF THE WEEK.

Royal College of Surgeons.—The following gentlemen were admitted members of this college on Friday, July the 3rd, 1846:—J. Lauder, S. H. Burbury, J. Walsh, H. Evans, M. H. Clayton, E. Hall, J. Robinson, J. Yeoman, B. Lister, J. Clegg, T. James, D. P. Barry, and T. B. O'Donnell.

Apothecaries' Hall.—The following gentlemen were admitted licentiates on the 2nd of July, 1846:—Thomas Francis I'Anson, Joseph Cooper Martin, Robert Thornton, John Hillman, Robert Douglas, Thomas Osborne Walker, Edmund Welby Apperly Day.

Appointments. — Surgeons: Robert Bernard (who was promoted by the Admiralty as a token of respect for the memory and services of his brother, the late assistant-surgeon Sidney Bernard, whose martyrdom in the cause of humanity in the case of the Eclair steam-sloop will be ever remembered), to the Contest brig at Portsmouth; J. Campbell, M.D. to the Columbine. Assistant-Surgeons: D. Courter, J. Henderson, and J. S. Davidson, to the Agincourt; J. Tickthorn, to the Contest: A Jackson, from Haslar Hospital, to the Columbine; G. Brewster to the Caledonia; S. Stephens, to the Avenger; G. E. Nicholas, acting, to the Bulldog.

War-Office, July 7th.—10th Foot: Assistant-surgeon David Stewart, from the 31st Foot, to be assistant-surgeon, vice Foss, who exchanges. 31st Foot: Assistant-surgeon Henry Clinton Foss, from the 10th Foot, to be assistant-surgeon, vice Stewart, who exchanges. 40th Foot Surgeon Robert Andrew M'Munn, M.D., from the 79th Foot, to be surgeon, vice M'Andrew, promoted on the Staff. 63rd Foot: George Fenton Cameron, M.D., to be assistant-surgeon, vice Gray, deceased. Hospital Staff: Surgeon John M'Andrew, M.D., from the 40th Foot, to be Staff-surgeon of the First Class, vice Edward Pilkington, who retires upon half pay. Marmaduke C. French, assistant-surgeon of the Philomel, will be favourably considered for promotion, when he shall have passed the requisite examination for the rank of surgeon.

Derby Militia.—William Peach, gent., to be ensign and assistant-surgeon.

Obituary.—On the 21st ult., at Great Percy-street, Pentonville, Hugh Houston, Esq., surgeon. On the 26th of June, at Torquay, aged 77, Honoratus Leigh Thomas, Esq. Mr. Thomas was more than once president of the Royal College of Surgeons, and for many years an examiner of the candidates for the College diploma. About three years since he retired from his practice, to end his days at Torquay. At Culmstock, A. Dunsford, Esq., surgeon, aged 27. July 7th, at Gloucester, aged 87, — Roberts, Esq, formerly a surgeon, at Malmesbury.

Royal College of Surgeons.—At a meeting of the council, on Thursday, July 9th, the notorious Hunterian orator, Wm. Lawrence, Esq, F.R.C.S.E., surgeon to St. Bartholomew's Hospital, was elected president, and Benjamin Travers, Esq, F.R.S., surgeon to St. Thomas' Hospital, and Edward Stanley, Esq., F.R.S., surgeon of St. Bartholomew's Hospital, were elected vice-presidents of the College for the ensuing year

Bristol Infirmary.—An investigation into the conduct of certain pupils of the Bristol Infirmary has recently taken place. It appears that the gentlemen in question had for a long time been guilty of very offensive conduct towards the house-surgeon of the institution. The result of the investigation has been the expulsion of one pupil, and the suspension of several others.

The late Mrs. Carr, of Knowsthorp house, Leeds, has bequeathed £500 to the Leeds General Infirmary, and £100 to the Leeds Public Dispensary.

Two thousand pounds have left to the London University College by the late Charles Holloway, Esq., of Hereford.

Baths for the Million.—We understand that the model establishment now in course of erection in Goulstone-square, White-chapel, is open for inspection on presenting a card to be obtained at the committee's offices, in Crosby-square.

Mr. Pittard, one of the students of anatomy, at the College of Surgeons, has just been suspended from his office, on account of his having been appointed lecturer on comparative anatomy at the Aldersgate-street School of Medicine.

Mr. Lough, the sculptor, has just presented his group, representing Samson slaying the Philistines, to the Council of the Royal College of Surgeons. It has been placed in the hall of the College.

Voltaire, the prince of wits, spared neither scientific nor literary men. "Chemical analysis," said he, "goes far, very far, but it will never succeed in telling us of what things are composed. Place for instance, flour, eggs, cream, and sweetbread in an alembic, and where is the chemist who, from analysis, shall guess the compound to be a *petit pâté*?"

An Unworthy Disciple of Æsculapius.—Some time since the tribunals of Austria were consulted on the propriety of altering the mode of execution for capital offences, and to substitute some more humane plan for strangulation; decapitation was suggested, but objected to as it accustomed the people too much to the sight of blood. A surgeon, member of the University of Padua, proposed a new method of strangulation, by which, when the victim was secured to the gibbet, some mechanism drew him suddenly by the feet and head, thereby occasioning instantaneous dislocation of the vertebral column, this mode of execution having been tried for one year, has just been definitively adopted in the Lombardo-Venetian kingdom. The surgeon who invented it has been breveted, and made "Director of Executions."

Electric Action.—A curious fact, showing the power of electricity, and the uncertainty of its effects, took place the other day at Ourville (Department of Seine Inférieure). The sky was much overcast about three o'clock in the morning, and thunder rolled heavily, very close to the earth, near a small house belonging to a M. Drouet. The threatening aspect of the sky caused the inmates to remain on the *qui vive*. The storm, however, passed off after a few minutes' rain, but at the moment when such an occurrence was least expected, a number of rocks which had nests in some high trees suddenly fell dead on the ground. More than two hundred were picked up under the trees, and a great number remained in the branches. It is supposed that these birds were asphyxiated by the electric fluid.

The disease among cattle, which, during the last two years, has effected such dreadful ravages in Germany, has recently re-appeared in Transylvania. The contagion is carried even by persons who have remained a moment in the neighbourhood of an afflicted animal. It often does not appear for five or six days after contagion, and the first symptoms are manifested by rigors and constant shaking of the head. The nose and mouth of the animal become dry and hot, and soon a fluid distils from them, giving off a strong smell. Pustules are found under the skin, violent diarrhœa supervenes, and the animal dies, usually about five days after the commencement of the disease.

We understand that steps are being taken for instituting a new dispensary at the west end. The institution is for the purpose of applying mesmerism in the treatment of diseases.

The following quiz on our English nation appeared in a recent number of the *Gazette Medicale de Paris*, into which it was copied from the *Journal de Maine et Loire*. Dr Faust Weiter, of Stuttgard, having obtained the body of a hanged person in order to pursue his phrenological studies, commenced examining the bumps. The bump of innocence predominated in a great degree. The doctor tried to resuscitate the victim. He was, however, called away by an old diplomatist who had been recently married, and who came to have his head examined. In the meantime the hanged person recovered, and, the organ of innocence acting strongly, he put the doctor's watch in his pocket. When the doctor returned he saw his subject installed in his own arm-chair and dressing-gown. "Sir," cried the ex-dead man, "in return for your kindness, I will tell you strange things. You have heard of the pleasures of hanging. It requires a more eloquent tongue than mine to relate them. Picture to yourself the intoxication of delights of the upper and lower regions both at once—all that the voluptuary could imagine of the most enervating and the most refined—the feasts of Balthazar, &c. Oh, Sir, I should like to breakfast; I have had so many calls on my strength during the last two hours." Eight days after, the doctor established the famous Society of Hanging in London, in which all the eccentric in England were united. Men worn out and used up by debauchery came to the doctor to experience the emotions of hanging. Suspended during two hours, in elegant parterres, their feet touching the earth, they enjoyed ecstasies beyond description. The doctor, his watch in his hand, counted the minutes, and watched the pulse, and when the patient had enjoyed a sufficiently long period of happiness, the cord was cut by his assistant, who was no other than the ex-hanged man of Stuttgard. Fifteen days ago the police of London caused the doctor's establishment to be shut up as immoral, and he received an order to quit England immediately. Among the most attached of his patients was a Lord *Quakerton*. Every week my lord was hanged for two hours, and when he understood the doctor was about to quit England, he wished to follow him. The three travellers arrived at the Hotel —, where, after an abundant breakfast, Lord Quakerton wished to be hanged; but by some caprice chose to have the doctor hanged with him; the latter heated by malmsey, caused himself to be suspended by the ex-convict of Stuttgard, impressing on him to cut the cords five minutes before the two hours should have expired. Whilst Lord Quakerton and the doctor were enjoying their suspension, the faithful servant walked off with the bank notes, and started with all speed towards Belgium, the refuge of all cheats and scoundrels. When the waiter of the hotel entered the apartment he only found the dead bodies of Lord Quakerton and the doctor.

MORTALITY TABLE,

For the week ending July 4, 1846

Causes of Death	Total.	Average of 5 summers	Average of 5 years
All Causes . . .	974	898	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	217	201	188
Sporadic Diseases—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	124	99	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	147	155	157
Diseases of the Lungs, and of the other Organs of Respiration	215	227	294
Diseases of the Heart and Blood-vessels . . .	25	23	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	112	87	72
Diseases of the Kidneys, &c.	14	6	7
Childbirth, Diseases of the Uterus, &c.	11	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	5	6	7
Diseases of the Skin, Cellular Tissues, &c.	1	1	2
Old Age	30	52	67
Violence, Privation, Cold, and Intemperance . .	70	26	26

No. 355. SUMMARY JULY 18.

PROGRESS OF MEDICAL SCIENCE

INCLUDING CHEMISTRY AND PHARMACY.

France.

ACADEMY OF MEDICINE.

Meeting of 7th July, 1846; M. ROCHE in the Chair.

THE PLAGUE.

M. Bégin read a long speech in favour of the report. M. Bricheteau read also a paper on the same subject, but against the report. Both orators merely reproduced the arguments, which have been already, several times, laid before the Academy.

The meeting adjourned at five o'clock.

HOSPITAL OF LA SALPÊTRIÈRE.

CLINICAL LECTURE ON INCOMPLETE GENERAL PARALYSIS OF THE INSANE, BY M. BAILLARGER.

Incomplete general paralysis is an apyretic disease, of long duration, chiefly characterised by difficulty in speech, progressive loss of power in the limbs, and insanity. This is a common affection, although it has not been known for many years; Esquirol was the first to mention general paralysis, in 1805, and insisted particularly on its importance as an unfavourable prognostic sign during the progress of cerebral disorders. Pinel, in 1809, and Georget, in 1820, also allude to the disease, but the first monograph on the subject was published in 1824, by M. Delaye; and in 1826 Bayle and Calmeil's papers appeared.

According to statistical accounts, one-sixth of the insane become affected with general paralysis. The causes which bring it on may be referred to two heads - predisposing and accidental causes.

The predisposing causes should be sought for in the influences of descent, sex, temperament, age, professions, climates, and seasons.

The transmission by descent of this form of disease cannot be any longer an object of doubt. Nothing is more common than to trace to the parents of the paralysed insane a tendency to cerebral disease, and chiefly to congestion. Bayle, out of 90 patients, counted 16, in whom hereditary transmission of the malady was evident. General paralysis is a great deal more frequent in the male than in the female sex; and amongst women, almost all those who become affected with it belong to the lower orders of society — a circumstance which is accounted for by the great share which intemperance must be admitted to take in its production. A plethoric, sanguineous temperament may be considered a predisposition With regard to age, we have, in 600 cases, met with *one* only in which general paralysis was observed under twenty; forty is the usual age at which the disease occurs. As to professions, all those in which intemperance is common may be said to predispose to general paralysis. Calmeil has shown that soldiers, custom-house officers, cooks, &c., are frequently affected by it. It was supposed that in warm climates the disorder was less common than in cold or temperate latitudes; this opinion appears to have arisen from imperfect observation. Recent researches at the sylums of Marseilles and Lisbon show that a very large proportion of the insane (one-fifth) become paralysed In summer the number of cases of simple insanity is certainly increased at least one-third, but it is not so with general paralysis, the frequency of which is very nearly equal in cold and warm seasons.

The accidental causes of general paralysis are cerebral congestions, suppression of an habitual hemorrhage, the omission of an accustomed venesection, intemperance, great mental exertion, epileptic fits, &c.

It is to intemperance that we must attribute the circumstance of general paralysis being more common in men than in women It is impossible not to be convinced of the great importance of this cause, when the analogy of the symptoms of intoxication with those of general paralysis is reflected upon. In both we find embarrassment of speech, weakness of the lower extremities, and a form of delirium, which is often the same in these two morbid conditions. Anemia, brought on by want and poverty, is not a very rare cause of general paralysis. We cannot be surprised at the fact, when we are aware of the frequency of passive congestion in debilitated subjects.

Symptoms.—Incomplete general paralysis is attended with alterations of mobility, sensation, and intelligence. Three degrees of intensity have been recognized; we will successively examine the three classes of symptoms in each stage of the malady.

(a) *Alterations of Mobility.*—1 *Speech.* In the first stage it is not always easy to detect the difficulty of speech. On examination, however, the enunciation is not precise; the patient seems to make efforts to speak, and the muscles which surround the mouth are affected with a characteristic tremulous motion. In other movements the tongue is generally free, although subject to a slight trembling. In the second stage of the malady the enunciation of words is preceded by a moment of hesitation, the accent is slow and drawling, and the syllables of each word are separated from each other by an interval. If the patient be at all excited, he becomes quite unintelligible, he stutters, passing over some syllables, and pronouncing others only partially. In the third stage, the language is altogether incomprehensible, although the patients often make great efforts to speak. Some remain completely dumb, and make no attempt to utter a single sentence. 2. *Weakness of the limbs:* The loss of power over the muscles of the extremities generally follows the difficulty of utterance. In the first period, the legs seem to the patient to have increased in weight, the steps become irregular, and progression abrupt and jerking In the second stage, the patient's legs tremble beneath him, and he stumbles frequently. In the third degree, the standing position and the exertion of walking become impossible; even the sitting posture cannot be maintained without assistance. In bed the legs may still be moved, though not raised At first, the weakness of the arms and hands is not well marked, but, after a time, it is betrayed by awkwardness, and want of precision in the movements of the hands. Towards the close of the disease the food cannot even be conveyed to the mouth by the hand. The patient must be fed. It is not uncommon to find the paralysis more marked on one side than on the other. 3. *Trembling of the limbs:* A general tremulous movement of the muscles is often observed, and is sometimes carried to a great extent. It is so well marked in some patients that alone it might characterise the complaint in its convulsive form. Grinding of the teeth is a singular symptom, common in the third stage, and occasionally met with in the second.

(b) *Alterations of Sensation.*—At first, neither general nor special sensation are in the least degree modified; but later, the common sensation of the skin becomes quite blunted, and is abolished in the third stage. Immense gangrenous eschars of the cutaneous structures, uncovering the muscles, cause no pain whatever, and the loss of the special sensation of the organs of vision, hearing, taste, and olfaction also, accompany the advanced periods of the disorder.

THE SPAS OF THE RHINE—DISEASES OF WOMEN: AMENORRHŒA, DYSMENORRHŒA, UTERINE HEMORRHAGE, PILES, STERILITY; BY PROFESSOR TROUSSEAU AND DR. LASLONE.—(Section 4.)

The mineral waters of the Rhenish spas are prescribed against many diseases particular to wome but they must not be advised without the grea circumspection, as the results would often be fai if they were indiscriminately recommended. The authors who have written on this subject appear to us to have followed a method anatomically correct, but practically deceitful. They unite in one group all the diseases belonging to the genital organs. Neither the physiologist nor the physician can be satisfied with so unnatural an amalgamation. We find the most abundant leucorrhœa accompanying a perfectly regular menstruation, and, on the contrary, a slight vaginal discharge during the catamenial epoch may be symptomatic of most serious general disturbance. We think we have adopted a safer plan in classifying these maladies, more with respect to the disturbed function than to the diseased organ; and we begin, therefore, with disordered menstruation.

Amenorrhœa.—Amenorrhœa may depend upon plethora, accompanied by hypogastric tenderness, leucorrhœa, and hemorrhoidal congestion. The Hombourg waters, in such cases, will generally aggravate the patient's sufferings, and increase gastralgia and precordial uneasiness. The tongue becomes coated, the skin hot, and febrile symptoms appear, unless the exhibition of the waters be interrupted. In one case only of the kind can the Hombourg wells be of use; it is when they are taken in sufficient quantity to overcome rebellious constipation, and to occasion abundant bilious motions. The hypogastric pains disappear, the appetite is recovered, and the head is freed from pain—results which might have been obtained with neutral salts, or with magnesian wells, and which, of course, are placed to the account of the Hombourg

waters. The treatment is continued, and the waters, acting not only by their cathartic sedative properties, but by their chemical elements, favour, rather than prevent, congestion of the abdominal organs.

In the congestive form of amenorrhœa, Hombourg therefore would, in our opinion, be often injurious. Ems and Schlangenbad seem to us, on the contrary, particularly well indicated in such cases; because, if the waters of Hombourg are stimulant and tonic by the iron and chloride of sodium and calcium they contain, those of Ems and Schlangenbad are, on the contrary, endowed with debilitating properties. When, on the contrary, amenorrhœa has been occasioned by chlorosis, repeated losses of blood, &c., the first indication is to improve the composition of the circulating fluid, and the very reason which led us in an opposite condition to prescribe the spas of Ems, must now oblige us to recommend Hombourg. If no gastric complication be present, purely ferruginous wells, like those of Spa, Schwalbach, &c., are most appropriate; but when, as it is mostly the case, the appetite is gone, the bowels are costive, and the digestive powers modified, then, indeed, the waters of Hombourg can be replaced by no others. This iron serves to re-constitute the blood, whilst the chlorides of sodium and calcium they contain, restore the impaired functions of the stomach.

Dysmenorrhœa.—What we have said of amenorrhœa applies equally well to dysmenorrhœa; both recognise analogous cases, and are, so to speak, only different stages of the same malady. Plethoric dysmenorrhœa is happily modified by the waters of Ems. It is not so where the difficulty of menstruation is accompanied with a cach[illegible]c condition of the system, whatever may have b[illegible] the first cause of the disorder. It is then that we find the waters of Hombourg productive of real benefit, and particularly the Stahlbrunnen, in which considerable quantities of iron exist. It is, however, proper to proceed with prudence, in order not to excite a degree of reaction for which the constitution may not be prepared. After the patient has been gradually accustomed to the use of the remedy, its power may be very much increased by the administration of the mother-waters, as they are prescribed at Nauheim, at Hombourg, or at Kreutznach. The baths become more stimulating; they cause on the skin active eruptions, and replace the chlorotic condition by a new state—provisional, it is true, but favourable to the appearance of the menses. There exist other causes of the retention or suppression of the catamenial secretions besides those we have enumerated: thus extreme narrowness of the neck of the womb may cause dysmenorrhœa first, and afterwards plethora. Ems in such a case would [illegible]wer better than Hombourg, but neither would be of any great service. We would prefer injections with fluids containing the extracts of plants belonging to the order solaneæ (belladonna, hyoscyamus, &c.). We have not, however, anything to do with the therapeutic treatment of such disorders, and, considering merely the relative advantage of mineral wells, we say that alkaline spas, rendering the blood more fluid, may, in some degree, compensate for the insufficiency of the orifice of the womb, and will, therefore, be more appropriate to the treatment of the form of disease alluded to.

Uterine Hemorrhage.—Salt and iron are tonic agents, and belong to the treatment of chlorosis; we therefore recommend them for the cure of chlorosis, in the waters of Wiesbaden, Hombourg, and Soden. If we recommend them also in uterine hemorrhage we shall appear to act like those whose indiscriminate eulogium of mineral waters we have disapproved of, and in whose hands the fashionable remedy seems to cure *all* diseases. To say that a drug can recal suppressed menstruation, and arrest uterine hemorrhage, seems a paradox, but is in reality a solid therapeutical truth. Without recalling the classic distinctions established between active and passive hemorrhage, it is certain that losses of blood may be connected with a condition of the system in which reactions are vigorous, or in opposite circumstances of circulation. According as the organs are more or less tonified, the escape of blood will be more or less easy, and the plastic state of the blood must also be taken into great consideration. Thus, in a recent wound, you will observe, if the patient is plethoric and strong, that hemorrhage is readily arrested by the ligature of the principal vessels; if he is debilitated, on the contrary, a large quantity of blood, or rather of bloody serum, escapes after ligature from the wounded surface. We observe analogous phenomena in metrorrhagia. If the menses are too abundant, the intervals are at first sufficient to permit the blood to recover its losses, but the frequent repetition of the same accidents leads to anemia. The molimen hemorrhagicum preserving its power, the loss of blood will grow every month more and more abundant, and we are then obliged to reason in a circle, the anemia being at once cause and effect. In proportion as the hemorrhage increases, the blood looses its plasticity, and the already too abundant evacuations will be thereby aggravated.

In such cases, astringents, acids, cold baths, a contra stimulant plan of treatment, will be advised, but these only during the menstrual period; between the epochs tonics should be recommended. The tonic and ferruginous waters of Spa and Schwalbach will be found useful; and every day the patient should take at meals some of the natural Seltzer water.

The double influence of alkaline chlorides and of martial preparations is speedily felt in anemia, consequent upon repeated uterine hemorrhage, and often cures the primitive hemorrhagic predisposition. Not that these waters are astringents or contra-stimulants, but because they are tonic, and regulate the functions. It is evident that we have no pretension to useful intervention in cases of organic uterine disease (cancer, polypus, &c.), except in so much that mineral muriatic waters may, when hemorrhage is arrested, assist in restoring some degree of strength, and permit the patient to bear with her sufferings.

ACUTE FARCY.

At a recent meeting of the Société d'Emulation the following case was communicated by Dr. Dezantières:—

On the 25th of December, 1841, a veterinary surgeon, aged fifty, wounded the index of his left hand while removing glandular enlargements from the neck of a horse affected with bronchitis and a discharge from the nostrils. A week afterwards a small abscess, containing, to all appearance, healthy pus, formed around the wound. Inflammation of the lymphatics set in on the 9th of January, and after some headache and stiffness of the neck, the patient, having been bled once, gradually improved, and was considered out of danger. On the 1st of February a sudden and violent pain showed itself in the middle of the anterior region of the left thigh, and a large abscess speedily formed containing a sanious pus. On April 15th pneumonia was detected in the left lung, and the popliteal region and ankle became shortly afterwards the seat of purulent secretion. The right eye suddenly inflamed, and the patient expired on the 21th of May.

The post-mortem examination was not permitted.

M. Barth, in reporting on this case, observed, with reason, that several of the most important features of acute farcy—such as the pustular eruptions, the discharge from the nose, and, more than all, the post mortem examination being absent—it was extremely difficult to assert with any degree of certainty the nature of the disorder; however, the abscesses, the swelling of the eye, and the first cause of the symptoms, seemed to class the case with those of farcy already known (see *Medical Times*, vol. xiii, p. 109 and p. 413).

DAN. M'CARTHY, D.M.P.

America.

SPINAL IRRITATION.—Dr. Little, in the *Southern Medical and Surgical Journal*, relates five cases of spinal irritation simulating different diseases. In the first case, a gentleman, twenty-four years of age, after laborious mental exertion, complained of an uneasy sensation in the region of the heart, attended with palpitation and difficult respiration, which were increased by bodily fatigue and mental excitement. The attacks came on in paroxysms, during which the face became red and the eyes suffused, and the whole countenance showed intense suffering. The accessions generally lasted from five to ten minutes. The patient's medical adviser supposed him to be labouring under disease of the heart, the nature of which he was unable to determine. A consultation was then called, when it was discovered that tenderness existed in the regions of the second, third, and fourth dorsal vertebræ. Pressure over these brought on a paroxysm. Rest, mild aperients, cupping, and pustulating the spine in the neighbourhood of the affected vertebræ, during three months, effected this patient's restoration. In the second case, irritation of the lower cervical vertebræ was mistaken for rheumatism. The patient, a negro, aged thirty-five, had for several years complained of transient pains in the arm and shoulder, for which he had used numerous remedies without benefit. Being a strong athletic man, accustomed to work in the open air, spinal irritation was not suspected, although the symptoms differed materially from rheumatism. After the use of the usual remedies for rheumatism without relief, a more through examination of the case was made, and it was now discovered that, on touching the lower division of the cervical vertebræ, the pain in the shoulder and arm was increased. Treatment similar to that resorted to in the first case was employed with success. In the third case spinal irritation was treated during two years as chronic hepatitis. The patient, a young man, twenty years of age, of nervo-sanguine temperament, complained of pain in the right shoulder, back part of the head and neck, and corresponding hypochondriac region. The digestive organs were considerable deranged. Various medicines, well calculated to subdue the supposed hepatic disorder, were had recourse to, when, after two years' treatment, spinal irritation was suspected, and tenderness found, on examination. By undergoing the same treatment as in the first case, this patient's health was speedily restored. The fourth case related much resembles the first, except that the disease occurred in a female, and was somewhat aggravated. The same remedies were used, with the addition of an ointment containing iodine, hydriodate of potass, and mercurial ointment, which was rubbed into the spine where tender; preparations of steel were taken daily, and a fortunate result was obtained. The fifth case is one of hysteria, much augmented in violence by spinal irritation. The disease occurred to a girl, seventeen years of age, whose menstruation was defective; at one period of the disease opisthotonos was present. The iodide of potass and iodine ointment was used with the best results, and a combination of iron and aloes was administered for some time, to restore the menstrual functions. The patient recovered completely. Dr. Little states that all parts of the spinal column may be affected, and the portion irritated may be known by its effects. Irritation of the cervical division is shown by pains in the face, temples, and scalp, frequently accompanied by rigidity of the muscles of the jaw. When the irritation is lower down, Dr. Little believes that pain in the region of the clavicle, scapula, and chest, arise, extending along the arm, and giving rise to great lassitude, sighing, spasmodic twitching of the muscles, &c. When the dorsal division is affected, there are, in addition to the foregoing symptoms, stricture across the chest, difficult breathing, palpitation of the heart, angina pectoris, darting pains in the intercostal muscles, at the edges of the ribs and epigastrium. When still lower down in the dorsal division of the spine, the effects of irritation show themselves in the stomach and abdomen. Besides these symptoms, a burning sensation in the sternum and ensiform cartilages is always felt in decided cases of irritation of the dorsal nerves. Dr. Little lays much stress on the liability of spinal irritation to be mistaken for other affections, and insists on the necessity for careful examination into all cases of a doubtful nature.

ACUTE GLOSSITIS.—Dr. Hamilton relates, in the *Southern Medical and Surgical Journal*, the case of a negro, aged twenty-five, who, at eleven o'clock in the morning, was heard to complain of a slight smarting sensation in the tongue, affecting mostly its right side, which he just then perceived for the first time. By three in the afternoon this sensation had assumed the character of a constant pain, attended by a sense of heat. Neither his skin nor his pulse showed any signs of fever. A dose of sulphate of magnesia was prescribed. In the course

of the same afternoon, and before the operation of the salts, headache came on, with increased secretion of saliva, and a sense of burning in the skin of the right side of his neck. No swelling nor hardness appeared anywhere except in the tongue, which was now thickened and rigid. It was redder than in the healthy state, but moist and slightly furred. At seven o'clock of the next morning, his medicine having produced three or four alvine evacuations, his headache was abated, and his case in other respects no worse. His pulse, however, had begun to indicate a febrile movement, his articulation was impaired by increased rigidity and tenderness of his tongue, and a long cylinder of viscid saliva hung from his mouth. This body of saliva, which he was unable to discharge by the action of his tongue and lips, he occasionally removed with his hand, but it was immediately reproduced. By one o'clock in the afternoon the case had made fearful progress; the patient's skin was hot and dry, his pulse had acquired a firmness and frequency much above the healthy standard, and the hardness and tenderness having extended from his tongue to all the parts embraced by the rami of the inferior maxillary and the hyoid bones, he was without the power of articulating a word, and at every breath he groaned. A vein was opened from which the blood was permitted to flow in a large stream, until relaxation was denoted by a weakened state of the pulse, anxiety, nausea, and sweating. Half an hour afterwards the anxiety and nausea were carried off by the act of vomiting, after which the patient rested quietly. At five o'clock, which was the fourth hour from the time of the bloodletting, the case was again examined, when the pulse was found to be recovering its firmness, and the skin to be losing its softness. With a view to restrain the circulation steadily, and to maintain the softness of the skin, it was deemed expedient to employ a nauseant in aid of the lancet; accordingly the patient was turned upon his back, his head a little elevated, and half a grain of tartar emetic dissolved in a spoonful of water, was with some difficulty conveyed into his stomach. Within twenty-five minutes after the administration of this remedy, its effects appeared in a general perspiration, a reduction of the pulse, nausea, and restlessness; and the lapse of an hour brought about an effort to vomit, by which these were entirely removed. After this, the state of the pulse and skin continuing good, the medication was omitted, and the patient rested comfortably through the night. At seven o'clock on the next morning, he was so far advanced in convalescence as to need no other prescription than rest and a gruel diet.

England.

[The following are the only articles of interest to the profession in the last two numbers of the Lancet.]

JAUNDICE—DEATH.—Dr. Ormerod relates a case of jaundice occurring in a boy, aged thirteen, who was a patient in St. Bartholomew's Hospital. Six weeks before admission he had been much alarmed by witnessing an accident in the street, immediately after which he felt pain and sickness, although he had before been in good health. After this he lost his appetite, and suffered from vomiting and pain in the epigastrium, and three weeks before admission his conjunctivæ began to appear yellow. On admission into the hospital his skin generally was of a bright yellow colour; his tongue furred; skin warm and moist; pulse soft and full, 64; abdomen soft and not painful on pressure, but the edge of the liver could be felt below the ribs. He was ordered calomel at night, and castor-oil in the morning. The day after his admission he seemed dull and heavy, and rather incoherent. Two large clay-coloured motions were passed, and his urine was of a brown colour, and very abundant. The following day he complained of headache. The same treatment was pursued, and on the seventh day of his residence in the hospital his alvine evacuations were distinctly tinged with bile; his pulse 100, of variable power. He was fretful and uneasy, and complained of pain in his back. He did not know when he was spoken to, and tried to throw himself out of the window. The same treatment was pursued, with the addition of nitrate of potass every six hours. On the following morning he had an attack of convulsions, during which he was unconscious. He moved his hand as if in search of some object. During the night he was so violent as to require restraint, after which he slept. Same treatment continued. On the tenth day he was noisy and restless. On the eleventh day his tongue was noticed to be dry and yellow, and his motions passed unconsciously, and were of a light colour. He talked incoherently, but answered questions correctly, though in a drawling, indistinct tone. Vision and the power of motion seemed imperfect. On the twelfth day his gums were found to be affected by the calomel; he had a dark motion, mixed with blood; his tongue was moist, and nearly clean in front; pulse 72, small, soft, and irregular. He was now ordered two grains of calomel every four hours, and four ounces of wine daily. On the thirteenth day a small, hard tumour was noticed in the right side of the epigastrium. On the fourteenth the tumour was found to have subsided. He lay on his back with his limbs extended, and now and then protruded his tongue, which was dry, and covered by a white fur. He paid no attention to any noise or light, though his pupils contracted readily. Pulse 64, *soft, but sharp*. The same treatment was pursued. On the fifteenth day he died, after having experienced three fits of dyspnœa. Post-mortem examination, eight hours after death: Limbs quite rigid; testes much and firmly retracted; sugillations on all the depending parts contrasting with the deep yellow colour of the skin elsewhere. Much fluid blood in the outer table, and diploë of the skull; dura mater unusually firmly adherent to the inner table, of a deep yellow colour, arachnoid dry, otherwise healthy. Posterior lobes of the brain much developed; the convolutions generally flattened; the substance firm, with numerous bloody points; each lateral ventricle contained about half an ounce of clear fluid. The left plexus choroides was stained yellow; the base of the brain was healthy. On removing the brain from the skull, a few ounces of dark blood ran out of the spinal canal, and subsequently coagulated. The pericardium contained about an ounce of yellow fluid; the pleuræ were quite dry; the lungs singularly dark-coloured. The abdominal viscera were generally healthy-looking externally, and, as far as examined internally, the hepatic duct opening freely into the duodenum. The liver was the only organ notably diseased; it was altogether about the natural size, but the left lobe was shrunk and wrinkled, and the right lobe proportionally enlarged. The right lobe was generally dark on the upper surface, this colour being due to an intense biliary congestion, not altogether uniform, but in patches separated from each other by lighter-coloured insterspaces, where the natural colour of the liver allowed the appearance of numerous deep-red spots of hepatic venous congestion, the biliary was separated from the bloody congestion by a well-defined line. The broad patches of biliary congestion were elevated above the surface of the surrounding parts; they had a smooth, glazed surface, were of about the same consistency as the rest of the organ, and showed, on section, that the same accurate boundary of the biliary congestion was distinctly preserved throughout the liver. These elevated patches were most widely separated from each other near the anterior edge, where they had quite a fungous appearance; the posterior part of the upper surface, and the under surface generally, were in a more uniform condition of intense biliary congestion. The lobulus Spigelii presented a few of these fungous elevations, but the left lobe on its under surface was uniformly pale and wrinkled; its upper was equally wrinkled, the interlobular plexuses were pale and transparent, and the lobe generally had a tough, leathery consistency, both when torn and when cut by the knife. Several biliary ducts were carefully dissected out, but no morbid appearance was detegible in them. The hepatic cells were distinct under the microscope, and appeared quite gorged with bile.

SPORADIC CHOLERA.—Dr. Basham reports a case of cholera which he has lately had under his care in the Westminster Hospital. The patient was a labourer, aged thirty, and when first admitted was affected by tumultuous clonic spasms affecting both upper and lower extremities, and causing distortion of the muscles of the face. The pulse was 110, small and hardly perceptible. The hands and feet were cold, and the hands and fingers were livid; the nails were bluish and lead like; the tongue was slightly furred and cold to the touch, and the breath conveyed the sensation of a current of cold air. There was frequent vomiting of a yellowish fluid in large quantities, and a constant purging of a nearly colourless broth-like inodorous fluid. The abdomen was soft, and there was no tenderness on pressure. There was no loss of consciousness. The patient, after being at work all the day before, went home in the evening, took his supper as usual, and went to bed, after drinking some cold water. At midnight he awoke with cramp of the stomach, followed by vomiting and purging. Four grains of calomel, and a grain of opium, were administered, together with a stimulating draught composed of brandy, ginger, nutmeg, oil of cajeput, and hot water. This draught was repeated in an hour. Two hours after the cramp diminished, and reaction became evident. He continued to improve until night, when the vomiting and purging returned; the matters discharged now, however, resembled thin pea-soup. The same remedies were repeated as before. On the following morning he was much better, and from that time he continued to convalesce rapidly, so that in four days from the date of his admission he was able to leave the hospital.

CARIES OF SUPERIOR MAXILLARY BONE.—DEATH.—Mr. Cousins reports a case of caries of the superior maxillary bone from the University College Hospital. The patient, a gas fitter, aged fifty, had lived irregularly during his early life and had more recently been exposed to cold and wet; he had always enjoyed good health, with the exception of a slight attack of rheumatism. About nine weeks before his admission into the hospital he was attacked without assignable cause with soreness of the mouth and swelling of the face, especially over the right superior maxillary bone; six weeks from the commencement of the attack, matter began to flow from his nostrils. When admitted into the hospital he was emaciated, with much prostration; complexion pale, very sallow, and muddy; countenance very anxious; expression and general aspect much altered; lips pale and dry; sordes on the teeth; breath fœtid, apparently so from the affection of the jaw; no appetite; bowels open daily. The left leg, from the ankle to the knee, was considerably swollen, pitted on pressure, and there was a little redness of the skin at the back; pain in the leg increased on pressure, the induration greatest along the outer side; no hardness in the course of the vessels; no swelling of the right leg, or induration, swelling, or tenderness of the left thigh; superficial veins of the legs, especially of the left leg, enlarged. Sounds and impulse of the heart healthy; pulse 104, very small and weak. Pain in the right side of the chest; breath short; little, if any, cough; respiration chiefly costal; position of lying frequently altered; difficulty of articulation; some tremor of tongue and limbs. Ordered beef tea, milk, and four ounces of wine in twenty-four hours. On the following day the pulse was very small, 100, the right side was generally dull on percussion, with more pain during the night; urine clear, scanty, specific gravity 1016, slightly acid, containing albumen, which, when coagulated, occupied one-sixth of its bulk. Ordered every four hours, conditionally, potassio-tartrate of antimony, a quarter of a grain; peppermint water, one ounce. At night, the pulse being scarcely perceptible, the medicine was omitted. On the following day he was much in the same state, 8 oz. of port wine daily. On the fourth day he was delirious, the pulse 120, weak, and the abdomen tympanitic rose-coloured spots appeared on the chest, and and he gradually sank and died in the afternoon. At the post mortem examination, the following appearances were found.—swelling of the left leg, the cuticle raised by effusion; moderate emaciation; green lines in the course of the superficial veins. About two drachms of serum in each lateral ventricle of brain; cerebral substance soft. The right pleura contained above fifteen ounces of turbid serum; old adhesions opposite third, fourth, and fifth ribs, on the lateral surface near the nipple;

other old adhesions near the spine; pleura costalis more vascular than usual; a little pus on pleura pulmonalis, and a little very soft lymph on the lower and middle lobes of lungs, which weighed twenty-four ounces and a half, and contained much less air than usual. Neither upper nor lower lobes were very brittle, both fleshy, the lower very dark, mucous membrane of bronchi not remarkably red. In the left pleura, five ounces of fluid, deeply tinged with blood. The left lung, weighing twenty one-and-a-half-ounces, larger than the right, and containing more air; the upper lobe considerably puckered; in it several distinct portions of putty-like matter; the lower lobe contained bloody serum, very like froth; brittle, and had an odour of putrefaction; mucous membrane redder than in right lung, uniformly so, and apparently from imbibition. The pericardium contained nothing to be noticed, except a patch over the right ventricle. Heart exceedingly soft and flabby; uncontracted; in other respects healthy; blood in right ventricle nearly all fluid, with some air bubbles; weight nine-and-a-half-ounces, lining membrane of heart and of aorta deeply coloured by imbibition. Mucous membrane of stomach softened both at the cul-de-sac and near the pylorus. At the lower part of the ileum, one of Peyer's patches rather distinct; large intestines much distended with gas; intestines and mesenteric glands otherwise healthy. Spleen about six inches in length; its consistence for the most part pale and very soft; the blood in it contained some air. The gall-bladder contained very thin yellow bile, and a number of calculi which sank in water and were very brittle. The right kidney much enlarged, weighing seven ounces. much of its outer surface distinctly red, in red punctiform spots; substance flabby and very soft, the redness greater in the cortical than the tubular portion. The left kidney smaller, presenting the same characters in a less degree. The urinary bladder a little distended. The veins of the left leg and the left knee-joint did not contain pus. Extensive caries of the superior maxillary bone.

TRUSS.—Mr. Tod recommends a new truss which he has invented for cases of inguinal hernia. Mr. Tod's alteration consists in making the pressure on the internal, instead of on the external, abdominal ring.

PARAPLEGIA.—Mr. Gibb, one of the pupils of the Newcastle-on-Tyne Infirmary, reports a case of paraplegia occurring in a stout healthy countryman, aged fifty-six, after continued exposure to wet from working knee-deep in water. The disease first manifested itself by the occurrence of severe pains in the right hip and thigh, extending in a less degree to the left hip. In the course of the night, after the appearance of these pains, complete paraplegia came on, with partial loss of sensation in the affected extremities. There was not much constitutional derangement present; there was no pain or uneasiness in the spine, and no evidence of visceral disease. He was scarcely able to move his legs when in bed, and when placed upright they dangled about almost beyond his control, and could not in the least be made to support the weight of his body. The legs, especially the right, were colder than natural. Their sensibility was not much impaired, and the only other affection complained of was obstinate constipation. Purgative and alterative medicines were ordered. About ten days after his admission, no change having taken place, cupping on the loins was resorted to, followed by a course of iodide of potassium and sarsaparilla. After about three weeks' treatment, a tenth of a grain of strychnia was ordered three times a day, with aloetic pills at night. A week afterwards the strychnia was prescribed every four hours, and a week subsequently the quantity was increased to an eighth of a grain. The dose of strychnia was afterwards again increased to a sixth of a grain every four hours. After about three weeks' perseverance in the use of the strychnia, the patient was slightly improved in condition. Two days afterwards he was seized during the night with sudden and very violent convulsive movements and pains of the upper part of the body only, with vertigo, pain of head, general excitement of the cranial nerves, and a feeling of present annihilation. These severe effects of the strychnia did not persist long, but he afterwards had occasional slighter attacks, with pricking pains, and almost imperceptible twitchings of the legs. To omit the strychnia, to take a strong purge, and to have cold cloths to head, afterwards to take decoction of aloes twice a-day. The twitchings of muscles ceased after two days' continuance; creeping sensations in the feet remained; he was much improved, being able, when assisted, to support, in some measure, the weight of his body; bowels were very free, and headache was gone. To have of sulphate of iron, quinine, and extract of gentian, each a grain, three times a-day, with the aloetic pills when needful. Within a fortnight from this time he was able to go about on crutches, and he had almost completely regained the sensibility and heat of his limbs; slight nausea and headache, with a coated tongue. To have a blister to the back, and to resume the magnesia and rhubarb, with five-grains of blue-pill, every night. From this time he improved steadily, and was able in about five months from the date of his admission into the hospital to walk a short distance without assistance: he was accordingly discharged. Four months after his discharge he reported himself quite well, with the exception of slight weakness in his right foot. Mr. Gibb reports a second case, which only differed from that of which we have given an abstract, in the presence of tenderness over the lumbar region. An issue was employed in this second case without benefit, and the recovery under the use of the strychnia was by no means so complete as in the case we have noticed.

CALCULUS VESICÆ IN A FEMALE CHILD AGED FIVE.—Mr. Parson reports a case from the Sussex County Hospital, in which a female child, aged five, was unable to stand or even sit, remaining always in the recumbent position, and complaining of a constant pain in the lower part of the abdomen, greatly increased by any motion. There was incontinence of urine, the continual dribbling of which had produced considerable excoriations of the nates, thighs, and legs, the urine was clear and neutral, but rather pale. On the introduction of a probe into the bladder, a calculus of considerable size could be easily felt, lying close to the orifice of the urethra, with the mucous coat of the bladder in immediate contact, the stone could also be felt from the rectum. The child, in all other respects, was apparently in good health, though she complained much of thirst. It appeared that the child had, about sixteen months previously to her admission into the hospital, been attacked by rigors. She was at the same time unable to retain her urine, and complained of pain during its passage. This state continued to increase up to the period of her admission. An operation was evidently necessary for the extraction of the calculus, and was performed in the following manner. A common director being introduced into the urethra, an incision was made at the side of the passage, commencing half an inch above, prolonged downwards and outwards at the side of the vagina, dividing the left nympha, and continued inwards to the bladder, so as to join the director at its immediate passage into the bladder, with the view of leaving nearly the whole of the urethra intact. An opening large enough to admit the forefinger being made, and subsequently, by dilatation, rendered sufficient for the forceps, the stone was easily grasped; but the anterior part, being soft, broke down under the pressure, and was brought away in the blade of the instrument. The stone was again grasped, and extraction attempted, but considerable obstruction being experienced, the forceps were withdrawn, and a careful examination of the impediment disclosed two portions of what appeared to be wire, thrust through the soft parts downwards and backwards into the rectum. All attempts at removal only increased the difficulties; and this fact being ascertained, the stone was pushed back into the bladder. The parts thus partially engaged were levered up, and with great difficulty brought out at the wound, and the stone was extracted. About an hour and a half after the child's being placed in bed, the wound was examined, in consequence of no discharge of urine taking place. A small coagulum was found, blocking up the opening, and a copious flow of urine followed its removal. Everything went on favourably after the operation, and in less than two months the child was discharged from the hospital, able to retain a teacupful of urine at a time. The calculus measured one inch and three-quarters in one diameter, and two inches and a-quarter in the other. Its weight, together with the hair-pin, was four drachms and thirty-two grains.

POISONING BY OXALIC ACID.—Dr. Brush records a case in which a healthy man, aged sixty, took an ounce of oxalic acid dissolved in a tumblerful of water, by mistake for salts. He discovered his mistake directly, and brought on vomiting by tickling the fauces with his finger, and swallowing a pint of warm water. He also obtained an emetic very quickly. About half an hour after the poison had been swallowed, Dr. Brush administered a quantity of prepared chalk suspended in water, together with a tumblerful of the whites of eggs, and lost no time in using the stomach-pump, by means of which about two quarts of fluid, holding a considerable quantity of prepared chalk in suspension were thrown into the stomach; vomiting was induced before the tube of the instrument was removed, the whole contents of the viscus being subsequently evacuated by the pump. After this, the patient again took a tumblerful of prepared chalk-and-water, and also of the white of eggs, which he experienced great difficulty in swallowing, and was then put to bed. About two hours from the time of his taking the acid, symptoms of collapse set in; the trunk and extremities became icy cold; the fingers livid, the pulse scarcely perceptible; oppression at the præcordia supervened, with sighing, &c. Bottles of hot water were applied to the extremities and pit of the stomach, and the patient swallowed a cup of hot tea, which produced reaction; there was no tenderness over the abdomen. He complained, however, of a burning sensation in his mouth and throat, great difficulty in swallowing, thirst, acid eructations, and drowsiness, which continued for two or three days. He took draughts composed of prepared chalk and bicarbonate of magnesia alternately every hour, and on the morning of the second day took an ounce of castor oil, which required to be repeated and assisted by an enema before it produced the desired effect. His diet was limited to arrow-root and barley-water, iced—small pieces of ice being allowed to dissolve in the mouth, which allayed the thirst and burning sensation in the throat. On the evening of the third day there was great irritability of stomach, and incessant vomiting; pulse full, hard, 80, tongue very foul, and dry at the tip and edges, restlessness, together with considerable heat of skin over the region of the stomach, but no pain or tenderness on pressure. Two dozen leeches were applied to the epigastrium, and a large linseed-meal poultice was placed over the whole abdomen, which relieved the symptoms—the skin regaining its natural temperature, the pulse becoming soft, less frequent, and the tongue moist. Vomiting and irritability of the stomach continued some time longer, but passed off by degrees under the use of minim doses of hydrocyanic acid: and the patient eventually quite recovered his health.

LIFE ASSURANCES.—At the annual meeting of the south-eastern branch of the Provincial Medical and Surgical Association, held at Ashford, on Wednesday the 24th June, 1846 (Mr. T. Martin acting as secretary), the propriety or impropriety of furnishing statements and opinions of a confidential nature respecting the health of patients, to life insurance offices, who are not always found to respect such confidence, became the subject of discussion, and the following resolutions were unanimously adopted:—First, that the members present at this meeting are of opinion that the insurance offices have no claim whatever on the private medical attendant of any candidate for life insurance, for an opinion on the state of his or her health. Every life insurance office has appointed medical referees of its own, on whose opinion the office ought to rely, in their decisions on the insurance of lives. Second, that copies of the foregoing resolution be sent to all the offices for life assurance.

At a meeting of the Alabama Medical Society, held on the 12th February last, it was resolved to offer a silver cup as a premium for the best Medical History of the State of Alabama; the essay, with the name of the writer, to be deposited with the Secretary of the Society, on or before the first Monday in December next.

ORIGINAL LECTURES.

Anatomical Museums; their Objects and Present Condition.

Being the substance of a Lecture delivered before the Pathological Society of Birmingham, the Professors and Students of Queen's College, Birmingham, and before a Medical Audience in Edinburgh and in Glasgow.

By R. KNOX, M.D., F.R.S.E.,
Corresponding Member of the French Academy.

Medicine as an art and science—Efforts made for its advancement—Records of diseases—Museums—Anatomical museums—Requirements in an anatomical museum—Physiological museums—Pathological museums; their preparations—Strange mixture of museums at present—Impossibility of preserving recent specimens so as to retain the colour and appearance of the parts—Hunter's museum—Cuvier's museum—Museum at the Edinburgh College of Surgeons—Mr. Brookes' and Mr. Langstaff's museums—Origin of museums—Pecuniary value of museums—Sale of Mr. Lizar's museum—Expense of keeping up museums—Baillie museum—Should museums be given up in toto?—Reasons for their preservation.

Many persons of seemingly sound judgment are firmly persuaded of the all but total uselessness of medicine as an art; others, whilst they admit its occasional utility as an art, refuse it a claim to be called a science. Some have applied the same, or similar remarks, to the art of surgery—to pathological or medical, as well as to operative, surgery. Medical men themselves admit the great uncertainty of their art. The conjectural nature of medicine is quite as well understood by us as it is surmised by the public; but we, notwithstanding, claim for medicine and for surgery the first place in the arts, in consequence of their unutterable importance to individual life. Disease is a game of chance, in which most of the human race are at one time or other engaged. The stake is not unfrequently life, nay, with the timid and the constitutionally unhealthy, it is almost always so. Now, into the scale, against the preponderating beam, mankind, however sceptical some individuals may be whilst revelling in the prime of life and health and intellect, will ever throw the aid of the physician and of the surgeon, however small that aid. Were it but a feather weight, they feel and know that such aid may turn the balance in their favour, putting off for a time the most dreaded of all events—dissolution. But however this may be, however useless medicine as an art may prove, and has proved, especially on those dread occasions when it is most required—I mean the visitations of plagues and cholera, of typhus and of contagious epidemic disorders—one thing is certain, namely, that all the higher minds occupied with physic and surgery have ever laboured in earnest for the improvement of these arts, and have never doubted that they could be improved. Witness the efforts made at various times and places, from Vesalius and Harvey to Hunter and Dupuytren, from Galen to Baillie, and not by individuals merely, else the effort might be deemed an accident in the history of genius, but by hundreds and thousands of medical men continually, though unheeded, and in the stillness of private life endeavouring to improve their art. That they conscientiously and honestly believe in the capability of its improvement, cannot then be doubted. The history of past and present times proves this undeniably; but, above all, is this opinion proved by those vast and expensive collections of records of disease, and cure, and failure, which we now possess in the form 1st, of printed and published descriptions; 2nd, of countless expensive drawings in oil and water-colours; 3rd, of models and casts of structure, fashioned with much labour and no little cost in plaster and in wax—a most costly and expensive material, as so employed, and of little endurance or value; 4th, and lastly, by the settling, and disposing of, the diseased parts themselves in crystal vases, at a cost and trouble of which those who have not wrought in anatomical museums cannot have the slightest conception. All these efforts, sometimes due to corporate bodies, at other times the unaided labour of some public-minded, science-loving person, prove incontestibly the honest zeal with which the highest minds in our profession have at all times laboured to improve their art, and to give to it, if possible, the stability of a science.

Anatomical museums, to which allusion has just been made, form, when the structures admit of suitable preparation, the only certain and safe records of our science and art: of anatomy, which is an art, and of physiology, which is a science, although an exceedingly imperfect one. Anatomical museums should also contain the effects of disease on the organs; for, without some records of this kind, medicine must ever remain a mere empiricism—an art worse than conjectural—an imposture, in fact, practised on the fears and wishes of mankind. But, unhappily for the utility of anatomical museums, and no doubt also for the progress of medicine and of surgery, it has been found, after a long, painful, and expensive experience, that animal structures cannot be preserved for any length of time, retaining their original colour and general appearance, without which it is manifest that they cannot serve as records of disease.[1]

The discovery that no such records as the actual diseased structures could be preserved for any length of time, in a condition to benefit the art, must have been speedily made, and in the very infancy of anatomical scientific research. The perseverance in an avowedly faulty method must have originated in the difficulty of finding a substitute for the actually diseased structures. Men do not readily, and at their own proper cost, follow for any great length of time a hopeless method. Great efforts were accordingly made all over Europe to find a substitute for the structures themselves, a substitute sufficiently exact to recal to the mind of the physician diseased alterations of the organs he had already seen, and exhibit to the as yet uninstructed student appearances not calculated to create false impressions. Before I speak of these efforts, as well for the sake of method as from a desire not to be misunderstood, I shall say a very few words on the objects of anatomical museums generally, and this will enable me to classify them in such a way as to be, I trust, thoroughly understood.

Anatomical museums, or rather collections, have a reference, 1st, to schools of mere human anatomy and physiology of the kind called descriptive and elementary. Such museums are or ought to be attached to all good medical schools; but they need not be extensive nor combine heterogeneous materials, as they generally do, such as preparations and numerous skeletons in comparative anatomy, preparations of morbid structures, fossil remains, objects of natural history, &c. All such specimens are singularly misplaced when found in elementary schools of human anatomy. Pathological preparations, or specimens of morbid structure, are also altogether misplaced in such museums; they belong to *hospitals*, where all lectures on the practice of physic and of surgery, whether systematic or clinical, ought to be delivered. Abstract pathological anatomy like abstract pathology, can have no practical bearing, and scarcely belongs to the profession as a practical art. They enter into the history of the philosophy of the art, but they do not belong to it in its practice. At all events, elementary schools of human anatomy should have museums simply adapted to their wants; these are very simple. a few human skeletons, separate bones, sections of crania, some artery or two, not readily followed, so traced as merely to show them more distinctly, the pelvis and cranium of both sexes and all forms, the fœtal skeleton at all ages, the pelvic organs and their products, a few preparations of the organs of sense, these are all the preparations which can possibly be required by such a school.[2]

2nd. Anatomical museums have a reference to science, that is, to comparative anatomy and physiology. Such are the Great Anatomical Museum of the Garden of Plants, founded by Daubenton, and one now forming at Leyden by the care, I think, of Temminck. The museums of the College of Surgeons, in Edinburgh and London, as they now stand, are collections of all sorts of heterogeneous preparations and objects having very remote relation to each other; nine-tenths of the preparations are altogether useless in practice. Mr. Hunter's great work, his physiological museum—a work of pure science, and evincing transcendant genius, was, together with the nucleus of a pathological or professional museum which Mr. Hunter had also collected, unfortunately handed over by the government to the corporation of surgeons—a strictly professional and practical body—to whom the bones of mammoths, fossil, or recent skeletons of vertebrata, and dissections of the invertebrata, were of no more value than so many objects of curiosity or *virtu*. The result has been unfortunate for science and for the medical art, and must in the end prove embarrassing to the college or corporation; it has withdrawn science from its legitimate place—the British Museum—and burdened unnecessarily and severely a corporation whose whole pursuits must ever be strictly practical, and have a reference solely to man and to the diseases which afflict him. The annual expense of supporting such a collection is enormous, without the smallest practical benefit to those who support it. The preparations of pure science being to those of economic or professional use nearly as a hundred to one.

3rdly, and lastly, anatomical museums may have reference to the practice of the arts of physic and surgery, in which case they are called museums of morbid or pathological anatomy.

These collections or museums, which are wholly of a practical nature, and which should be placed in hospitals as books of reference, and entrusted to the hands of practical professional men, are at present either placed in situations where they cannot benefit anybody, as in Pall-mall East, or mingled—I had almost said oddly jumbled up with the bones of the dinotherium, the ichthyosauros, the mammoth, the rhinoceros, and megalonyx, in the museum of the

[1] Since delivering this lecture, I have observed reported in the *Medical Times* journal the experience of M. Piton, Assistant Conservator of the Musée Dupuytren, as to the best mode of preserving anatomical preparations. If I remember right, for I quote from memory, he says he has experimented with 200 preserving liquids, and at last found a suitable one; he may try 200 more and not find one. Such experiments have been often made, and have always failed.

[2] Dr. Wm. Hunter has remarked, somewhere in his controversial writings with the Monros, that he once attended a course of lectures in the North, where much was shown in preparation or under glass, but very little was demonstrated by dissection, or to this effect. This, no doubt, was a great defect in any course of descriptive anatomy, almost as bad as the chalk sketches which prevail now everywhere in the schools, instead of proper demonstrations of real structure; but in the case of the Monros, it is was not altogether the fault of the teachers. But it must always be admitted that the celebrated fist Monro profited much by his visits to Paris and Berlin. He then heard Winslow and others, and there learned no doubt the meaning of the word museum, and picked up many ideas which he could skilfully, and with animal instinct, turn to good and profitable account—an idea till then altogether unknown in Britain. Of a piece with such contrivances as preparations in spirits and sketches in chalk for the teaching of students their elementary anatomy, are dried preparations of the lymphatics, injected with quicksilver, and last, and worst of all, wax models of the brain, nerves, and organs of senses, yet, better and worse, as one great dramatist has it, are those frightful things, called "papier mache" machines for teaching elementary human anatomy. To the credit of the schools I must admit, however that I have only seen such used in one school (in Glasgow), and in the hands of a monstrous quack, where we should have precisely expected it—in the hands of a person whose education and manners fitted solely for the pork-butcher trade, and from whom every gentleman and honest man must shrink. The imposture is so manifest that it requires a tolerable share of confidence to employ it, and this may be the reason why so few have ventured on the use of these machines.

Royal College of Surgeons, or, in smaller masses, in the private anatomical schools, where they are supposed to ornament the shelves of a room called a museum, to the astounding of the elementary student of anatomy, who naturally wonders at their being there; a wonder increased on finding that the persons who placed them there, and may be supposed to understand them, seldom or never enter these apartments, handing them generally over to the care of some person *not a practical man*, and who, therefore, cannot possibly *understand them*. This system of absolute confusion has become inveterate in Britain, and has done inconceivable mischief to science and art. But to return.

The earliest collection or anatomical museum we read of was that of Alexandria, visited by Galen; it consisted of two human skeletons, preserved by the Egyptian priests evidently for the purposes of science, an object which the great bulk of mankind never did, nor, perhaps, ever can, strictly comprehend. From that time we hear little for a long period of anatomical collections; yet about the time of Vesalius they must have been making progress in Flanders, in Italy, in Holland, and in Germany. A hundred and twenty years ago there were no anatomical museums in Scotland, and I presume as few in England. But prior to this time they had made considerable progress in Holland and in Germany, and perhaps also in France. The difficulties of preserving animal structures immersed in any preserving liquors so as to retain their natural appearances, had already been discovered; hence the vaunted celebrity of the method of Ruysch, whose anatomical preparations were said to have retained all the semblance of life. That Ruysch's method of injecting the arteries was superior to most other anatomists may be admitted, but neither he nor any other ever yet discovered a method or a preserving liquor which should enable animal structures to retain the appearances of life. This fallacy, then, may be given up; it has often been proposed, and as often been disproved.

M. Pitet, in a paper read lately to the Medical Society of Paris, admits that he has tried two hundred different liquids, and they have all failed excepting one. M. Pitet may be assured that that one, his last stay, will also fail. M. Pitet must surely know that the injecting vermilion and other colours into the blood-vessels will not give to morbid or healthy structures their natural appearance. M. Pitet is conservator of the Dupuytren Museum, and has a strong interest in putting up natural structures, and in preserving and maintaining the ancient method.

The line of demarcation I have hastily sketched above, between the various kinds of anatomical collections and their legitimate objects, has neither been understood nor acted on—that is, 1st, Simple elementary human anatomy and physiology; 2nd, Scientific or comparative anatomy and physiology; and 3rd, Pathological or morbid anatomy, have been continually jumbled, mentally or mechanically, by anatomists, either in their writings or in their museums; hence most of the ancient museums were, and most modern museums even yet are, mere heterogeneous collections of materials, which, to say the least of them, do not stand well in juxtaposition. Yet a defect had been discovered in the progress of science and by certain great minds. The published writings of Morgagni and Baillie prove this; Mr. John Hunter, by the unrivalled labours of his head and hands, formed a pure scientific physiological museum; the former created morbid anatomy, the latter the science of life. As the distinctions in these branches of knowledge came to be clearly seen, anatomists would no doubt have followed or even preceded the impulse of the day; but men must bend to circumstances; they cannot absolutely control them. Anatomical collections [illegible] example, for the mere teaching the student [illegible] elementary anatomy should, probably, con[illegible] in nothing more than a few human skeletons of all ages, sets of the separate bones, also of all ages; *varieties of healthy structures*, wherever occurring, preserved as well as may be.[2] All other preparations are not only useless, but positively injurious. This is my matured and deliberate opinion after an experience of about thirty years of active professional life. Minutely dissected and set-up preparations, as they are called, of various intricate points in normal elementary anatomy merely encourage indolence, and do not even show what they are intended to display. The prostate gland, for example, and gland or glands of Cowper, neatly dissected and preserved, dried, or placed in preserving liquor, and shown round a class, instead of being dissected in a fresh state by a student, and handled and examined in that state by his fellow-students—these are the preparations which do mischief, add to the expense of anatomical establishments, encumber the shelves of a museum, and mislead and misdirect the student.

The sooner that anatomical collections, intended merely for instructing the student in elementary human anatomy, be cleared of all such preparations, the better; they encourage indolence on the part of the teacher and student.

Seeing that a museum adapted to the wants of a teacher of human elementary anatomy, is, or ought to be, so very simple in its nature, it may be worth while inquiring how so many teachers of human anatomy, men of acknowledged judgment, have deviated from this plain, common sense mode of preserving in their museums simply what was appropriate and requisite; for certainly most lecturers have deviated more or less from this plain, common sense standard. Some, no doubt, like myself, from an ardent love for scientific anatomy—that is, comparative anatomy—and hoping rather than believing that science and art might go hand in hand, deemed such preparations not altogether inappropriate; others perhaps from a mere love of collecting; some again (imitative animals) did as others did; the osteological collection, for example, in Lincoln's-inn-fields, is very simply an imitation of Baron Cuvier's, at the Jardin des Plantes, the ruling element in the Saxon mind, whether Dutchman or Englishman, being imitation; but be that as it may, certain it is that anatomical, and even surgical teachers, have made anatomical collections or museums as remote as possible from their proper pursuits in life. The burthen of forming and maintaining such scientific collections, was no doubt thrown on many by the force of circumstances, amongst which, no doubt, stands prominent the fact that in this country science is left wholly without support by the governing body; nay, is actually excluded from its proper place, as in the instance of the British Museum. Individuals, therefore, have hitherto been forced at their own expense to take it up. In Scotland, for example, the first scientific, that is comparative anatomical museum, was made by my partner, the late Dr. John Barclay. Nothing of the kind existed at that time anywhere in Scotland, whether as belonging to public institutions colleges, and universities, or in private hands. My brother and self, for the College of Surgeons, on a more methodical plan than the Barclayan, made a small anatomical collection, chiefly of comparative osteology. After a time I made another somewhat more methodical, at the request of Mr. John Turner, for the College of Surgeons; it now stands in their apartments, the most inappropriate place imaginable for such a museum. At that time, 1821, there was not a single skeleton of a fish in the museum of the College of Surgeons of London, now of England, so little progress had science made in this country in spite of the gigantic efforts of Mr. John Hunter. His *museum*, now unhappily incorporated with the collections of the Royal College, was formed long prior to these efforts, prior to the attempts of Cuvier. It was a wonderful effort of human genius, unapproachable, and as yet but ill understood. His museum, strictly a physiological one, is the only museum, properly speaking, in the world; other museums are merely collections, and thus the mingling it up with any mere collection is deeply to be regretted. In addition to the osteological museum I formed in the Edinburgh College, I afterwards made a second scientific collection on my own account; a very large collection was made by Mr. Brookes, a smaller but very choice one by Mr. Langstaff, and smaller collections by others. These efforts, which really ought to have been made by corporate bodies out of national funds, as they appertained to pure science, caused heavy losses to the respective parties; from a love of science we had taken on ourselves duties which truly belonged to national institutions, but which the holders of appointments in such institutions were unable or unwilling to attempt.

Having thus endeavoured to show the relations which various anatomical museums bear, or should bear, to different classes; having shown that preparations of mere elementary human structure belong to the anatomical schools, and are altogether misplaced in a college or surgical museum, where they simply encumber the shelves; secondly, that museums of comparative anatomy and physiology, as belonging to pure science, are, properly speaking, national objects, and ought to be placed in strictly scientific, not merely medical or surgical, institutions, and supported at the national expense; that when found, as in this country, in the museums of colleges of surgeons, of medical and surgical colleges, and of private teachers of human anatomy, they naturally excite the surprise of scientific foreigners, who ask how such collections came to be placed in such localities, and of what benefit they are to the members of such corporate bodies; the sooner the question is put by the physicians and surgeons of Britain and Ireland to the councils of the surgical and medical corporations in the kingdom, the better; it cannot be long delayed. I shall next examine the object and nature of the existing collections called pathological, or of morbid anatomy, the doing so being the great purpose of my present lecture.

The origin of such museums or collections appears to me simple enough. A gall-stone or urinary calculus is found in the practical rooms, or in a private post-mortem examination, and it is thought worth preserving. A fragment of dead bone, a *sequestrum*, in fact, is removed from the tibia or humerus of a living person, and the surgeon is desirous of preserving it as a record of the fact, and of his success, or, as it may be, his want of success. A young person dies of croup; a pseudo-membrane is found blocking up, more or less completely, the air passages, and denying access to the breath of life. The physician, having ascertained the fact, is anxious to preserve it together, with the air passages of the young person, as a proof of the correctness of his diagnosis, as an explanation of the cause of death, and as an incitement to a bolder practice occasionally, namely, an attempt to remove the obstructing body by surgical operation. Now, the utility, nay the necessity, for all these investigations, and for possessing such records of disease, is unquestionable; for, let morbid anatomy once cease, let it, even for a short time, fall into disuse, and the public is no longer safe. The profession must sink or rise with pathological anatomy. Nor is there any other safeguard against that flood of quackery which, like an ocean tide, continually

[2] A remarkable instance of the extreme difficulty always experienced in preserving any animal structures, occurred to me some years ago. I speak not of the thousands and thousands of pathological preparations I have seen rendered useless by immersion in spirits; this happens daily, and is known to all anatomists, but I speak of a circumstance of a most remarkable kind which happened in regard to healthy animal structures. A few years ago, being in London, I had the pleasure of waiting on Mr. Guthrie, who, though merely a surgeon, a most distinguished one, no doubt, and not an anatomical teacher, has yet had the merit of calling the attention of anatomists to some most interesting structures in man, well-known, it is true, to the older anatomists, but altogether neglected and forgotten by the modern. Amongst other interesting points, he called the attention of surgeons and anatomists to the transverse muscles which connect the membranous part of the urethra and the triangular ligament to the bones of the pubes; next he showed these structures to myself and to a brother anatomist *in preparations which had been for some weeks immersed in spirits; we could not recognise them*, and consequently doubted the accuracy of the dissections. Some years after, I had an opportunity of dissecting them in a fresh state in a very muscular person, and then only was I convinced of the correctness of Mr. Guthrie's views. The change, in fact, produced even on normal animal structures by an immersion for some time in spirits, is quite extraordinary, and can only be appreciated correctly by those who have attended to it.

threatens the embankments of a highly cultivated country. Homœopathy, hydropathy, and numerous other quackeries, would speedily overspread the fair field of medical science. The public is ever open to receive and encourage for a time all modes of imposture. Incurable organic diseases would be declared curable; the diagnosis of the vilest charlatan would be held equal to that of a Baillie and a Hunter, and unseemly and unbecoming scenes would instantly arise in courts, the shameless quack disputing with the anatomist the evidence of his senses. Against all this we simply place morbid or pathological anatomy—the certain remedy of all these evils.

Pathological museums, then, having been considered absolutely essential to the progress of medicine and surgery, came, of necessity, to be formed as well by corporate bodies as by individuals. The most natural idea of forming them was to place the morbid parts in some preserving liquor, and display them to the best advantage in crystal bottles or jars; and no doubt this method was very early adopted. Upon this plan were formed the great collections in Holland and Germany, Scotland, England, and France, from the earliest, probably those of Italy, down to the latest, the Musée Dupuytren of Paris. To recount to you the efforts made by individuals and by corporate bodies to form, amplify, and maintain these collections, would but occupy your time unprofitably; it will be sufficient that I allude to a few The preparations in the great pathological museums of Holland, which I examined some years ago, had lost all colour, and were comparatively worthless. The same fate, I am told, awaits the celebrated collection of the Meckels, for which a large sum of money (some thousands of pounds, I believe) was offered a few years ago, but which now would not sell for as many hundreds, in this country at least. The Musée Dupuytren must ultimately travel the same road; and as regards the collections in this country, it may be sufficient merely to allude to the pathological museums of the colleges of Mr. John Lizars, Brookes, Langstaff, and myself, all made without the least regard to expense, and which, when brought to sale, absolutely did not realise the price of the glass in which the preparations were placed Mr. John Lizars' museum must have cost in its formation at least £3000; when sold privately a short time since it produced £500, and since then, when attempted to be re-sold, it did not realise £250. In the meantime the profession has abandoned visiting the extensive pathological museums of the colleges—that of the College of Surgeons in Edinburgh, for example—opened in the most liberal way to the whole profession, is never visited by them. Practical men, it has been said, take no interest in museums. Why, then, do they found them? Why, then, do they support them? The museum of the College of Surgeons to which I belong must have cost them £10,000; that of the College of Surgeons in London ten times that sum. The annual expenditure is enormous, and the profession is taxed to maintain it.

The history of these museums is soon told. Take, for example, that of the college to which belong. In 1820 it contained from 200 to 300 preparations, as they were called, put up in a fashion entirely antiquated and useless. The public-spirited members of the college, namely, Messrs. Turner and Russell, Dr. Thomson, Mr. Wardrop, and others, were desirous of forming a collection worthy of the corporate body to which they belonged. They employed me to assist them, which I did for five or six years as their first conservator, and by the aid and exertions of my brother and self, and of several large purchases made by the college, the museum contains now an ample collection, chiefly, however, of pathological specimens To the profession, it has been of no value whatever. For the scientific anatomist and physiologist it is equally useless, not being large enough. The pathological part, if sold, would realise nothing worth speaking of: the cost is heavy, the annual expense burdensome to the college. To the profession it is useless: its increase cannot even be imagined with any propriety, and ultimately by far the greater number of preparations must be thrown away or preserved in a more economical and more useful manner; in fact, they getting rapidly into the condition in which we now see the Baillie Museum in London, and all similar collections.

The fate of the private collections should prove a warning not merely to individuals, but even to corporate bodies. The collection of the late Dr. Monro sold well, but that was purely accidental. So also did that of Sir Charles Bell; the rest proved ruinous to those who made them.

It was evident for years to myself and to many others, that the present mode of setting up, as it is called, pathological preparations would ultimately, as regards the greater part of pathological inquiry, require to be abandoned; it had lost all claim to utility. Structural changes produced by acute or even chronic inflammations it was absolutely hopeless to attempt preserving, so as to retain any semblance of their original appearance; with diseased joints it was, if possible, worse; highly inflamed membranes became perfectly colourless; pseudo-membranes could not be distinguished from original healthy structures; in short, it were endless to speak of what this method could not preserve—the difficulty would be in finding any morbid structure which it perfectly did. The preservation of cutaneous and venereal diseases was, for obvious reasons, never attempted, so that practical men, as I have already said, finding nothing useful in the museums, ended by abandoning them. These objections and difficulties must have been, and were in fact, seen long ago; but how were they to be got over? What were the methods and plans devised by medical men to make up for the want of utility in their existing pathological collections; both here and in France the individuals who were most instrumental in pushing forward these views—convinced that without something of the kind medicine and surgery and physiological science must stand still, or rather retrogress—for nothing stands still—and that we should all be obliged to become homœopathists or hydropathists, had early foreseen and lamented the evident failure of the museums; but, as regards myself, it was when I commenced teaching from the pathological museums that this fact came fully out. Tables were covered with preparations, yet nothing was to be seen—if seen, nothing was understood. The museums deserted by the student and junior practitioner—the elder and more experienced walking in only occasionally to investigate some point in morbid anatomy interesting to a case in hand. Then wax was tried, and paintings in oil and water colours—all failures, as we shall afterwards see; then plaster casts, and here my brother, assisted by Mr Henry Goodsir, made the greatest efforts imaginable, but still failed for reasons to be afterwards explained.

A grave question then arose in my mind—conflicting doubts—were museums to be given up *in toto*? Their expenditure ruined everybody. Expenditure—a word at which even nations take alarm—an expenditure without any commensurate return, some museums costing £500 or £600 per annum, and one supposed erroneously to be a professional one, as many thousands. In the meantime, the profession benefits nothing. Perhaps they meet with a severe and intractable case of skin or uterine disease, respecting which they would fain have some information, and they come to the museums Here they find no representations of such diseases; or it may be some severe contagious or syphiloid case; the same objection occurs; the museum either contains no such preparation, or the preparations contained in it are so altered as to be wholly unrecognisable, and therefore useless. Perhaps the practitioner is desirous of seeing a good specimen of Bright's disease, or an eye case, or he sees what he takes to be a tumour; the conservator explains to him that it is a clot of blood, which had lost its colour; or a clot of blood is taken for a tumour, a half putrid brain for a *ramollissement*. Wearied at last, he quits, resolving not to return, but remarking, at the same time, that he supposes all to be right, and learning the fact that by immersion in spirituous liquors morbid and healthy specimens lose their colour, and at last become unrecognisable. These things are precisely similar everywhere—in Holland, France, and England.

Before leaving this part of my discourse, permit me to say a few words in regard to the views of those persons called practical men, *par excellence*, some of whom are supposed, and perhaps do hold very peculiar opinions in regard to the inutility of museums in any form. In my younger days there were many such persons; a few such may still be found.

These gentlemen consider pathological investigations generally as of little or no use, and all museums worthless. Their objections may be triumphantly answered: 1st, the greater number of such persons are unequal to minute investigation—mere artisans who, like Pott, see nothing in diseased structures, but parts "*thoroughly rotten and distempered.*" This is not pathological anatomy at all; they imagine it to be so, and fancying their belief to be sound or correct, very naturally despise the art. If this were pathology, they would be quite right. When such men get into leading positions they thoroughly destroy them. Nothing thrives near these coarse, trading corporations, and thus more individuals so situated will crush down all right-minded men for an age. The evil would soon, and has not unfrequently, come to this, that men holding official appointments were not able to state the plainest pathological fact before a court of law. Such a state of things, however, could only go on for a few years; it would infect the high places, until at last, in some court of law, as has more than once happened, an anatomist would rise and show that the anti-anatomical physicians whom the government had sagaciously named their scientific counsel had admitted evidence, affecting human life and character, on the part of a country practitioner, of so low a cast, so utterly worthless, so shamefully incorrect that, should the case go to the press, remonstrances would arise throughout the whole kingdom against such shameful ignorance.

(To be continued.)

A Course of Lectures on Practical Midwifery.

Delivered this Session at St. Bartholomew's Hospital, and revised specially for the Medical Times,

By EDWARD RIGBY, M.D.,

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery to St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

NATURAL LABOUR.

[Concluded from p 151.]

We left our patient, Gentlemen, at the close of our last lecture, in the middle of a pain. I then told you that as the pains proceed the os uteri becomes thickened; and you will recollect that I also told you that the contractions of the uterus commence not in the fundus, but in the vicinity of the os uteri. If but little liquor amnii has collected between the head and the membranes, or if they have given way prematurely, and the os uteri be still thin, when a pain comes on it becomes stretched so tightly upon the head that you can scarcely distinguish it from the head, and that the slightest attempt to pass the finger between would endanger its tearing. As labour advances, however, the liquor amnii collects between the head and membranes in greater quantity, and forms a soft bag, which, from its elastic nature and conical wedge-like form, exerts much and at the same time equable pressure on the os uteri, and greatly assists in its dilatation. In this way pain succeeds pain, till the mouth of the womb has assumed its maximum of dilatation, about two and a-half inches. You may now expect the membranes to give way, and a gush of liquor amnii to take place, ending the *second stage* of labour. You will recollect, Gentlemen, that the pains I have described in the second stage are confined entirely to the preparation of the parts, and are not intended to act in the expulsion of the child. Hence these contractions have been called *dolores præparantes*. There seems to be no doubt that the earliest uterine contractions are for the purpose of determining the position of the child, whilst those I have just described prepare the parts for its expulsion; and these two processes complete the first stage of labour, according to the more usual division. On examining the os uteri at this period, you will find streaks of blood mixed with the mucus of the parts, and this is what has been termed by the nurses "show." It is produced by a slight separation of the chorion from

the os uteri, which bleeds in consequence. A violent rigor or attack of shivering very often occurs just at this stage. This seems to be nothing more than a harmless modification of convulsive action, and differs from shivering from cold in its not being relieved by heat. The patient does not feel cold, and often expresses her surprise that she should shiver so violently without being cold. This shivering or convulsive action seems to arise from nervous sympathy of the muscles of the body with the dilatation of the os uteri. The same kind of rigor often occurs after the expulsion of the child. So much then, Gentlemen, for the second stage of labour.

The pains of the *third stage* are often borne much more patiently than those of the second stage, although they are far more powerful and severe. During the second stage the pains have been chiefly situated in the back; they have been of long duration, and wearing, and apparently to no purpose, for the patient is not conscious of any progress taking place; but the moment the liquor amnii comes away in a gush, a change in the character of the pains follows. The patient feels that her labour is making some advance, and is encouraged to bear her sufferings with patience and resolution. The pains in this *third stage* of labour are called by authors the *dolores ad partum proprii*, or the true or peculiar pains of labour. The os uteri has now disappeared entirely, and the uterus and vagina form one continuous canal from the fundus to the os externum. It usually happens, however, especially in primiparæ, that the anterior lip does not dilate so quickly as the posterior one, so that, when the head of the child advances, it becomes pushed down, so as to be felt beneath the pubic arch, or even, in some cases, to protrude between the labia. Some practitioners advise that, when this is the case, attempts should be made to force the lip above the head. Any such efforts, however, are not only useless, because they cannot be successful, but worse than useless, because they inflame and irritate the part; they only tend to make it swell more, and render it less capable of dilatation. A little patience, Gentlemen, is all that will be required, and the lip of the os uteri will, after a pain or two, recede of itself. The head of the child now quits the uterus, and is embraced by the vagina, where it suffers considerable pressure. The bones overlap one another at the sutures, and the fontanelles are more or less obliterated. If the child be alive, the puffy swelling of the scalp, or *caput succedaneum*, of which I have before spoken, and which arises from the venous circulation in the scalp being obstructed by the pressure of the os uteri and vagina, may now be felt. When the head has passed the os uteri, and entered the vagina, not only do the uterine contractions become more powerful, but the vagina itself contracts, and the partly voluntary, partly involuntary, bearing-down efforts of the abdominal muscles commence. The abdominal muscles act with great energy; the patient holds her breath, and begins to strain. When the head has passed the os uteri, and enters the vagina, the fourth stage of labour commences. The patient's face becomes red and swollen, and she perspires profusely. Her whole character seems changed, and however much she may be determined to submit quietly to her pains, she often screams involuntarily. I have known women of strong mind, who had previously determined to suffer in patience, irresistibly compelled to scream on the accession of one of these pains. The patient's eyes are wild, and she wishes for, yet dreads, the approach of the uterine contractions. Many women, who are affectionate wives and fond mothers, are in this stage guilty of words and actions quite contrary to their natural feelings, and at the remembrance of which they are afterwards exceedingly shocked. We see this, however, almost solely among the lower classes, where moral control is not so powerful as in those who are better educated. The patient's expression of pain in this stage becomes remarkably altered, and I am quite sure that this change is so characteristic as to enable a person of experience on entering the lying in room to say immediately, on hearing her moan, whether or not she be in the fourth stage of labour. I told you before that the patient now holds her breath when a pain comes on, for the abdominal muscles act with the uterus, and she is irresistibly compelled to strain and bear down. I only mention the matter again to caution you against allowing your patient to strain or bear down before this stage of labour has commenced, as such efforts, being voluntary, can only be injurious by exhausting her strength. Some persons have supposed that the involuntary contractions of the abdominal muscles during this stage arise from the head of the child irritating the rectum by its pressure: but I should remind you that these powerful contractions never come on until the os uteri is fully dilated, and the head of the child has passed into the vagina. In many women, especially primiparæ, the head of the child, during the last few days previous to labour, is often very low down in the pelvis, so as to produce considerable pressure on the rectum, and always without exciting contractions of the abdominal muscles. The moment, however, that it enters, and distends the vagina, this is excited to contract upon the distending body, and calls the abdominal muscles into strong sympathetic action. We see the same bearing-down efforts produced by the introduction of the hand into the vagina. There is, in fact, the same sympathetic relation existing between the abdominal muscles and the vagina as between them and the rectum. The moment the rectum is filled with fæcal contents, it contracts, and makes an effort to expel them, which is immediately followed by a (not altogether voluntary) bearing-down effort of the abdominal muscles. The tenesmus of dysentery is a modification of the same phenomenon; the rectum is in a state of high irritation, and frequent contraction from the passage of acrid mucus, &c., and the sympathetic action of the abdominal muscles becomes both painful and uncontrollable. I should also notice that, with regard to the endurance of labour-pains by different classes of females, rank and education have a great influence. The higher the patient's station, the better she bears her troubles, generally speaking.

The head being now fairly in the vagina, the liquor amnii no longer escapes during the pains, neither does it come away in the intervals. A slight discharge may take place at the commencement and close of each contraction, but during the pain the head completely fills up the vagina, and of course prevents any discharge of fluid from taking place, and in the absence of uterine contraction there is no cause acting to expel it. As the pains go on, the head advances lower and lower, and if you examine the anus you find it considerably dragged out of its place, with a circle of dilated veins surrounding it. During a pain the perineum is pushed out into a firm ball by the head, which recedes again as the pain goes off. This receding of the head has been attributed to shortness of the umbilical cord, or its being twisted round the child, which is quite an erroneous notion. The head recedes between the pains in *all* labours, and obstruction to its advance from shortness of the cord is a *very* rare occurrence. The recession is due to the natural elasticity of the perineum and os externum. The pains become more and more severe, and the intervals between them shorter; the head advances more and more through the os externum, until at length, during a pain, it has protruded so much that now it does not recede, but remains half expelled, encircled by the soft parts at their greatest stretch. In this situation it usually remains during the interval, and the final expulsion of the head is not completed till the next pain. This moment is called the crowning (the *caput coronatum* of the older authors), and is very advantageous, as from the degree of dilatation which it produces it greatly diminishes the chances of perineal laceration. The amount of dilatation which the perineum will bear is enormous, and, were it not of such common occurrence, would appear almost incredible. In some cases it becomes as thin as a piece of membrane. The head passes through the os externum in the smallest diameter that it can offer to it. As soon as the head is expelled the pains usually cease, and the patient generally enjoys a few moments of comparative ease; but soon they return. The face of the child begins to swell, and then the shoulder under the pubes begins to come forward, is expelled, and followed immediately by the other shoulder, and then the other parts of the child slide out. These tremendous efforts, by which the expulsion of the child is effected, are called *dolores conquassantes* by foreign authors. During this stage the excitement of the patient is extreme, especially among the lower classes. Women at this time often express themselves and sometimes even act in a most unnatural manner. This has been taken into consideration in cases of infanticide by the medical jurists of Germany, and I think very properly so.

When the child is expelled, the liquor amnii which has been contained in the upper part of the uterus escapes, and thus far, if the labour has been natural, there has been no discharge of blood. With the expulsion of the child, I should tell you that the fourth stage of labour ends.

After this, however, the fifth stage commences, characterised by the *dolores cruenti* of the foreign writers. These pains are of quite a different character from those last experienced, and, from the peculiar sensations attached to them, are denominated by the nurses *grinding pains*. These pains effect the detachment of the placenta, and they are attended by a discharge of blood. The cord now comes down, and the placenta is expelled with the amnotic surface forwards. A considerable discharge of blood often now takes place, and continues for some time afterwards, gradually losing its sanguineous character. This discharge constitutes the lochia. At first the discharge from the quantity of blood it contains, is called the lochia rubra.

When there are twins, the labour of the second child commences in the third stage of labour, that is, the passages are already prepared by the first labour. The interval between the expulsion of the first child and that of the second is very various. In some cases it takes place immediately; in other cases from half an hour to three or four hours intervenes; occasionally, even two or three days may elapse. If it take place soon, the os uteri is fully dilated, and the parts are fully prepared by the previous labour; the membranes form a swelling, and burst, and the process is conducted as in the first. The placenta of the first child is usually retained, to be discharged with that of the second. Now, as regards the connexion of the placentæ, considerable disputes have arisen as to whether they are single and separated from each other, or form one conglomerate mass. The fact is that they are more or less both; they generally form a conglomerate mass, but have no anastomosis between their respective vessels. I have met with one case of anastomosis, however, in a triplet placenta, but this is very rare. So much, Gentlemen, for the description of natural labour. I shall now occupy the few minutes we have left by a few remarks on the diagnosis of labour. No subject is more puzzling than this, especially during the early stages. The first symptom of labour approaching, is the subsidence of the abdominal tumour. This often occurs some days before the absolute commencement of labour, however. It indicates three points—that the uterus is well-formed, the pelvis is well-formed, and that the head is descending into the cavity of the pelvis. The bladder now becomes very irritable, and in some cases the pressure on the organ is so great that you are obliged to introduce the catheter to relieve the patient. The patient is now able to breathe, and move about better; she also feels much better, both in health and spirits, than she has for some time; and should she have been desponding, she now becomes more confident in the result. The secretion of mucus in the vagina becomes much increased, and is of that clear albuminous character which I have already described. At our next meeting, Gentlemen, I shall speak of the diseases of pregnancy.

Dreadnought Hospital Ship.—A quarterly court of the governors of this hospital was held on Friday last, at the office in King William-street; the chair was taken by the treasurer, J. Labouchere, Esq. Amongst the subscriptions announced was one of 900 dollars (£187), from Key-Sing, the chief commissioner and commander of the Chinese forces, and one from Mrs. Soames, her portion, of £1,000 intended to have been bequeathed by her late husband, M.P. for Dartmouth. Key-Sing was elected vice-president of the hospital, and Mrs. Soames a life governor.

ORIGINAL CONTRIBUTIONS.

ELECTRO-MAGNETISM AS A REMEDIAL AGENT.

By John Buxton, M.D., M.R.C.S.

Electro-magnetism is a remedial means, which, though it has attracted much attention from some medical men, is too generally disregarded, and even unknown. By other modes of application the use of electricity takes much time, and is both toilsome and expensive. If vitreous electricity, set in motion by the common machine, be had recourse to, the patient will need two attendants—one to turn the cylinder, the other to direct the current—and besides the greater expense of the apparatus, much labour is required to keep it in order, by dusting, cleaning the cylinder from amalgam, warming it with hot flannels, &c.; and even then, how dependent are we upon the state of the atmosphere!

The voltaic battery likewise demands much attention, cleaning, and continual change of acid, which becomes united with the zinc and neutralised.

Nothing, on the contrary, can be more simple than the mode of using the electro-magnetic coil. A Smee's battery is dipped into a jar three fourths full of diluted sulphuric acid (one-sixth concentrated acid and five-sixths water), and is connected to the helix by copper wires, which are fastened by the screws. When the mercury in the little copper cup of the helix becomes tarnished by the galvanic action, it may be touched with a little of the acid, and then wiped with a piece of linen rag. Having used the coil, the copper wires may be unscrewed, and the battery lifted out, and hung in an empty jar. The acid, if the zinc plates are properly covered with amalgam, will not need changing for weeks or even months.

The communication with the patient is formed by means of two copper wires passing from the helix, and having a copper plate of moderate thickness and size (about three inches diameter) at their further ends. These are wetted, and applied to the surface of the patient's body.

Whether electro-magnetism is equally powerful with vitreous, resinous, or voltaic electricity as a remedy in disease, and whether it is applicable to a different class of cases from them, are questions requiring a mass of evidence and research, which I regret that I do not possess. I am inclined to the opinion, however, that asthma is more readily subdued by galvanism than by electro-magnetism, at any rate I cannot lay claim to much success for the latter in the cases which have come under my care.

The complaints in which I have found electro-magnetism useful, are those characterised by local torpidity of nervous action not arising from organic disease. Instances of this kind are amenorrhœa suppressionis, paralysis e plumbo, when the system has been freed from the poison, partial paralysis consequent on rheumatism or other enfeebling diseases, or resulting from a strain or other local injury, some cases of indigestion, with their consequences, as tic douloureux, and some instances of asthma. In some cases in which we cannot suppose nervous action to be deficient, but rather abnormal, or in excess, it alters it, so as to subdue pain. By its stimulating powers it also produces resolution of some indolent tumours, and has been of use in chronic varix.

PARALYSIS OF THE ARMS FROM RHEUMATISM.

I.—James Latten, aged forty-five, cook to a sea-captain.

September 21st, 1844. He arrived in England in the middle of last June, after a ten-weeks' voyage. During this time he was exposed to much inclement weather, which brought on a sharp attack of rheumatism, so that he was confined to his bed the greater part of the voyage. He is now suffering from shortness of breath, general debility, partial paralysis of the arms, with much pain, especially at nights, and attributes these complaints to a severe course of salivation which he underwent on board ship. Since he landed he has been an out-patient at St. Bartholomew's Hospital, where he was ordered blisters to the nape of the neck and upper arms, and not finding himself improving rapidly, obtained other advice, and was ordered small doses of strychnine during a whole month; this proved of some service, both in relieving the pains and paralysis, and he was then recommended to be galvanised. At this time he felt low-spirited, nervous, and unable to use his limbs freely; appeared thin, and the arms, but especially the hands and muscles of the thumb, were much shrunk. The electro-magnetic current was passed through the hands and arms pretty strongly for ten minutes. To leave off all medicine.

23. The hands feel somewhat stronger, and the nocturnal pains in the arms have been less. Repeat the electro-magnetism for a quarter of an hour daily

25. Has had no pains in the arms since the 23rd, and feels stronger.

Up to the end of October he attended regularly, being operated upon from twenty to thirty minutes daily.

November 28. Has come occasionally this month, and now feels nearly as well as before his illness. The hands and arms have steadily improved from the first, and are very much fuller, although not quite so strong as formerly. He has entirely lost the nervousness and depression of spirits.

August 8th, 1845. Arms still are rather weak; in other respects he has been quite well.

II.—William Eaton, aged thirty-five, ship-musician, and healthy in appearance, was a messmate of Latten's, and his case was in almost every respect similar, having been taken ill with the same disease at the same time, and been treated, both on board and since landing, in the same way; he had not suffered so severely; his hands were less shrunk, and he was not so reduced. The patients always came together, but Eaton improved most rapidly, and left off the treatment about the beginning of December, 1844, at the same time as Latten, being perfectly well, and on the 8th of August, 1845, he could amuse in taverns with his fiddle as well as formerly.

III.—Mr. Riordan, Ship Tavern, Saffron Hill, of middle age, and healthy appearance.

September 6th, 1845. About a year ago he had an attack of rheumatism, lasting six weeks, and from which he gradually recovered, but the pains settled in the left hand and wrist. A month ago the muscles of the ball of the thumb were much shrunk; he complained of considerable pain in the arm, especially at night and in the morning, and could use that thumb and the forefinger but very imperfectly.*

He was subjected to the action of the coil, from the nape of the neck to the hand, five or six times last month, for twenty minutes each time. It quite removed the pain, the muscles have nearly regained their natural size, and he can use the hand as well as formerly

MUSCULAR DEBILITY CONSEQUENT ON RHEUMATISM.

IV.—Mrs. Page, of 61 Provost street, City-road, aged forty, married, and mother of nine children. Is of spare and enfeebled habit.

About ten years ago she became much heated from quick walking on a cold evening in December, and was then kept waiting outside her house for a quarter of an hour, which chilled her, and caused shiverings, followed the next morning by stiffness in the limbs, with swelling and great pain. This was the commencement of a rheumatic attack, which lasted four months, and left her very weak. Three years ago, soon after the birth of her last child, she again took cold, suffered from erysipelas of the face; the limbs afterwards became affected, and have been gradually getting worse since. The hips, and especially the loins, feel powerless; she has pains in the legs continually, and a sensation of numbness and debility extending even to the ankles; in other respects her health appears pretty good, digestion and the uterine functions being regularly performed, and the sleep undisturbed.

September 22nd, 1845. Was subjected for twenty minutes to the action of the helix, the current being passed from the nucha to the feet.

24. After her visit she walked home with much less difficulty than she had in coming hither, and continues to feel decidedly better.

October 20. Has been attending about every second or third day, and is better, but still has soreness in the limbs. She has now and then had a slight relapse from over-exertion, or exposure to the weather.

January 13th, 1846. Has attended once or twice a-week, and been steadily improving. She has lost the pain in the loins, and weakness and soreness of the limbs and ankles; can walk further than during the last three years, and, except a little stiffness in the limbs, feels quite well.

PARTIAL PARAPLEGIA FROM DISEASE OF BLADDER AND URETHRA.

V.—M. P., a tailor, of spare habit and worn by disease, of about forty-five years of age, came under my care on the 16th of August, 1844. Three years ago he became troubled with difficulty in passing water, could not always void it when he felt inclination, and it often came only drop by drop. He had also pain and a feeling of weakness in the back, which has gradually increased. Bougies and catheters have been employed about every three or four days during the greater part of the last two years, and aperients, alteratives, and tonics of various kinds resorted to, but without benefit. He is now subject to frequent attacks of retention of urine; the loins and lower extremities are exceedingly weak and painful; he finds great difficulty in walking, and stoops much, being unable to stand erect. For the last eight months he has passed flexible catheters for himself every three or four days, and has been improving; for before this the left leg was drawn up towards the abdomen, and the knee bent. The urethra also is in a healthier condition, though a stricture may be easily discovered in the membranous portion by examination with a bougie.

Up to the 4th of September I electrified him, by insulating him, and exposing him to slight continuous electric shocks from a medical bottle (small Leyden jar) and by taking sparks along the course of the sciatic nerves. He continued the use of the flexible catheter once or twice a-week.

In three or four days the stiffness, weakness, and pains in the loins and legs were much diminished; he was less languid, and the freshness always experienced after the process lasted the whole of the day.

About this time he took cold, with catarrh, from exposure to damp weather, which caused a slight relapse, though the unfavourable symptoms soon disappeared.

On the 5th of September, the weather being very damp, I used the electro-magnetic apparatus, directing the current from the loins to the feet, and repeated this about every second or third day to the end of the month, for twenty or twenty-five minutes each time, sometimes applying the one pole to the hands, and the other to the abdomen or feet, as it seemed requisite

The bowels during this treatment became quite regular, though they had not been so for months previously; the pains left him, his general strength rapidly increased, and he regained his power over his limbs so as to be able to follow his occupation with comfort. He passed the catheter but once a fortnight at that time, and at the commencement of this year continued to be able to walk two or three miles without inconvenience, enjoyed tolerable health, and was free from pain in the loins, except occasionally, if he over-exerts himself or takes cold.

STIFFNESS OF THE SHOULDER FROM CONTUSION.

VI.—Mrs. Nash, fifty years of age, residing in the Kingsland-road, always enjoyed good health. Thirteen weeks ago she fell upon her shoulder, and considerably bruised it. It was poulticed, and liniments were applied, and subsequently warm fomentations used. In about six weeks she was able to use it a little, and it has been since rather improving, but she is quite unable to raise the hand higher than her ear, or place it behind her head.

January 8, 1845. The electro-magnetic current was directed from the nape of the neck to the hand for twenty minutes. She was also advised to use passive motion three times daily. Attended about every second or third day till the 3rd February, when, having recovered nearly the full use of her arm, she discontinued the treatment.

* STIFF-NECK.

VII.—Mrs. Castledine, aged seventy, of Provost street, City-road, has been subject to winter-cough

for years, but in 1844—5 it proved unusually severe. Since that period, notwithstanding the use of blisters, liniments, &c., the neck has been very stiff, not allowing her to turn her head to the right side. This stiffness extends over the region of the right platysma, and evidently also affects the sterno-mastoid muscle. It arose, she thinks, from the violence of the cough; at the same time, also, she partially lost the vision of the right eye.

September 11, 1845. Has been galvanised with the helix, from the nucha to the stiff part four times, for about twenty minutes each day, and is much relieved.

15. Attends daily, and is much better; but no change has taken place in the eyesight. She afterwards came every two days till the 27th September, when she left off treatment, the neck being nearly as free as ever, but the sight remaining unaltered.

NUMBNESS IN THE ARM.

VIII.—Mrs. S., residing in Acton-street, Gray's-inn-road, fifty years of age, in the middle of last summer complained of weakness and numbness in the right arm, which she had observed for about a week or ten days. It quite left her after having the electro-magnetic current passed from the nape of the neck to the hand for about ten minutes. Her health had not been otherwise impaired, nor have the symptoms returned.

COSTIVENESS, DESPONDENCY.

IX.—Mrs. H., aged forty-three, living in Foster's-buildings, Whitecross street. About nine years ago, three months after a painful accouchement with her second child, and much subsequent weakness and costiveness, she was suddenly attacked with great mental dejection, desire to kill her child or herself, and similar thoughts. This state lasted nine months, notwithstanding the advice of the most eminent midwifery practitioners and physicians engaged in mental diseases. The bowels became regular, and her mind at once regained its wonted cheerfulness. The infant had been weaned three months previously. The costiveness, however, and depression of spirits soon returned, and she has never since been entirely free from these symptoms, though always better when pregnant, and worse after confinement, and while suckling.

Her last child is nine months old; she is still nursing it, but has lately become regular. The appetite is good, but there is always weight at the epigastrium after eating; the bowels are very costive, and may not be moved for a week, if medicine is not had recourse to; she has much leucorrhœa and pain in the back, with piles; is subject to severe headache, mostly at the occiput; is very nervous, and her feet are generally very cold.

November 29, 1844. Galvanised with the helix for twenty-five minutes from between the shoulders to the abdomen, first placing the lower pole on the epigastrium for four or five minutes, then shifting it for about the same time to the right and left hypochondriac, the gastric, hypogastric, and right and left iliac regions. I moreover enjoined care in diet, forbade medicine, but advised her to make the the attempt of evacuating the bowels daily at any stated period, so as to induce the habit.

December 2. The bowels have been freely moved both yesterday and to-day; her spirits are much better, and the sleep at night much more refreshing. To repeat the electro-magnetism daily.

5. Still improving; very slight headache at the occiput, much less than formerly; has no uneasiness at all at the epigastrium after eating; feels hungry after the electro-magnetism, and enjoys her food much more than before beginning this treatment. Has not been so cheerful for years.

After the first fortnight, notwithstanding a punctual observance of the treatment and advice, she had a return of low spirits at intervals of perhaps half-an-hour or an hour a day, though by no means constant, or affecting a regular type. Her depression was brought back by being frightened by a bull.

In January, as her health did not further ameliorate, and she complained of the child wearying and weakening her, I persuaded her to wean it. When this was accomplished, she became better, and passed the month of February comfortably, and, being well, gave up the treatment.

November 1, 1845. Was confined about a week ago, and is going on favourably. During her pregnancy she was at times still annoyed with mental depression, but much less so than formerly, and the bowels have continued quite regular. She has been much more cheerful since her accouchement.

CHRONIC INDURATION IN BREAST, COSTIVENESS, AND VARIX.

X.—Elizabeth ——, aged forty-six, a waitress at a coffee-house in the New-road, of spare habit and sallow complexion.

This patient's mother died of cancer in the right breast when fifty-four years of age, having had mammary abscess after her last confinement, several years previously. She is not aware of this disease having occurred in any other of her relations. About six months ago she first observed a small swelling in the left breast above the nipple, accompanied with a sensation of smarting and cold extending down the side. She remembers receiving a blow upon this spot eighteen years ago. Till within the last three months she was very regular, and menstruation was profuse, but since that time the tumour has increased rather rapidly, being now about the size of two walnuts, knotty, and very hard. The bowels are not moved without medicine, which she has habitually taken twice or three times a-week for the last twenty-five or thirty years. She is very subject to attacks of indigestion, and scarcely passes a fortnight without so severe a headache as to incapacitate her from work. The tongue is clean, and the appetite generally tolerable. She seldom takes out-door exercise. Towards the end of July she first applied to me, and, entertaining fears that an operation would be imperative, I requested a friend of mine, experienced in such cases, to see her. He recommended: Tinct. iodinii co. m. x, ter die, sumend ex aquæ: and tinct. iodinii co. ʒj; Adipis, ℥j. M. ft. unguentum, bis die tumori applicandum.

Should this treatment have produced no perceptible diminution in a fortnight, he thought extirpation should be resorted to without delay, and kindly offered to obtain her admission into an hospital for that purpose.

This treatment made the breast warmer, but produced no further result, though persisted in for three weeks.

On the 1st of September, 1844, I saw her again; the tumour, coldness, and smarting were gaining ground, but she could not make up her mind to submit to the operation. I then proposed making a trial of electricity, which was done by directing sparks from the prime conductor to the affected part while she was insulated for ten minutes, and taking sparks from the breast at the same time. Thinking electro-magnetism would be more suitable in her case, I employed the helix on the 5th for the same length of time. Both these operations, but chiefly the latter, made the breast glow for a considerable time afterwards, and refreshed and enlivened her. I next determined to try and improve the functions of the primæ viæ, and advised her to apply the poles to each side of the tumour, for five minutes; entirely to avoid taking her medicines, and to observe regularity in daily going to stool.

11. Has used the helix daily. The appetite is greatly improved; she feels altogether stronger and better; the breast is much warmer, and she thinks the swelling diminishes.

It was with great difficulty that this patient could be persuaded to leave off taking aperient medicine once or twice a-week, and for two or three weeks she recurred to it occasionally, till she at last discovered that, though it relieved headache and the other concomitant symptoms for twenty-four or forty-eight hours, they again made their appearance. Meanwhile, electro-magnetism was daily resorted to; digestion and strength increased; the swelling, coldness, and smarting of the breast decreased, till, on the 5th of January, I could not discover any unnatural hardness there. The coldness, however, had not quite left her. On the 26th of November she showed me a varicose swelling near the inner condyle of the left femur, which she had had several years, and the electric current was passed through this daily till the 10th of December, when it had completely disappeared, and the skin over the spot had become shrivelled, nor could any means restore its natural condition. The weight in the leg and uneasiness she experienced in walking had nearly left her.

Till about the middle of February she came daily; the bowels were generally opened once a day, and she began to enjoy really good health, to which she had been for above twenty-five years a stranger, and could abstain from medicine with comfort. Till the middle of March she came two or three times a-week, and then left off treatment, being in good health, and only suffering from slight occasional coldness in the mamma.

November 3rd, 1845. The coldness has entirely left the breast, which is quite well, and the bowels are generally moved once a-day. She is no longer subject to bilious attacks.

DYSPEPSIA AND TIC DOULOUREUX.

XI.—Miss ——, aged twenty-five. Has never enjoyed sound health, having always been subject to costiveness since her childhood, and a weight at the scrobiculus cordis after eating.

About six years ago she began to suffer from pain in the temples, particularly in the left side, which soon became extremely severe, coming on every two or three hours, especially at night, on getting warm in bed; and if left to take its course, it usually lasted till early the next morning. She sometimes obtained a week or even a fortnight's freedom from pain, but seldom more. She had had the best advice that could be obtained in the country, and had undergone protracted courses of aperient medicines, tonics, specifics, sedatives, &c., including bark, quinine, arsenic, and steel, but never with more than very temporary benefit. About a year ago she was severely salivated, and the pain left the left temple, but soon located itself in the right. Previously to the salivation her appetite was irregular, but she has not had any appetite since, and loathes meat and other kinds of food, and constantly has much weight and oppression at the epigastrium, more particularly after meals.

The bowels are very costive, and she has been for years in the constant habit of taking aperient medicines two or three times a-week, either salts, quack pills, magnesia, castor oil, &c. Tongue clean; skin natural; sleeps well, except when in pain; catamenia regular, but accompanied with much pain in the back.

When an attack comes on, she has recourse to a dose of laudanum, back drop, or morphia, which lulls the pain, but produces the usual unpleasant symptoms of stupor, headache, and nausea.

Having heard in the country of the application of galvanism, she came to town with the express purpose of trying it, and its daily employment during a week for twenty minutes and half an hour passed through the body, from between the shoulders to the epigastrium, completely removed the pain. During a second week's trial, however, the pain came on in the temple as severely as ever, and she sent to request me to see her, that she might have some anodyne. She had morph. acet. gr. ⅙, statim sumend.

On inquiring into her case, I ascertained that she had received no instructions as to diet, was still using her usual aperient medicines, and considerably transgressed the dietetic rules suitable to dyspeptics. I therefore forbade her various indigestible articles of food, interdicted the medicine, and strongly recommended her to persevere in the treatment she had begun, with attention to regimen, exercise, regular habits, &c.

December 2nd, 1844. I applied the electro-magnetic apparatus to the nape of the neck and abdomen, in the same way as mentioned in Mrs. H.'s case, only keeping it rather longer to the epigastrium, and directed her to repeat it daily.

9. Till yesterday the bowels have been moved daily, but in the evening she found the pain beginning, and it increased as usual till the morphia was resorted to. The bowels have been opened this afternoon, and she is free from pain.

16. Took cold from sitting in a draught, and had a return of her pain yesterday.

26. Has felt remarkably light and well till to-day, having lost the uneasiness at the pit of the stomach, enjoying her meals, and been tolerably free from pain, but owing to exposure to the damp

weather, had a slight attack yesterday. She dreads the winter as the period in which she has most torture.

After this time she went home, and pursued the treatment there with so much success, that in February she wrote to say she was in really good health, and had had no return whatever of suffering since leaving London, that the constipation of the bowels and indifferent appetite had quite left her, and that she had discontinued the treatment for two or three weeks without experiencing any relapse. In June I heard that she had had a slight return, owing to a severe cold, but that it had subsided under the plan of treatment pursued while in London.

NEURALGIA.

XII.—Captain S. a stout, ruddy, middle-aged man, of sanguine temperament, in the merchant service, came to inquire if galvanism would be of service in his case. In the spring of 1842 he was at sea for forty days, exposed to very inclement weather, and drenching wet, and subsequently experienced a gradual prostration of strength, loss of appetite, and on reaching Liverpool was so ill that the medical men despaired of his recovery. They ordered him when a little better to go to Scarborough, his native place, for change of air, and he there somewhat improved, but became subject to cramps in the legs from the ankles upwards, seizing him at all periods of the day. For these, after the failure of other means, he was blistered from the nucha to the sacrum, and the sore kept open with ung. sabinæ, by which plan he was somewhat relieved, but his strength again completely failed. Liq. potassæ arseniti, in very large doses, was administered, and gave a little temporary relief, and another blister was ordered, and kept open. Afterwards the liq. potassæ arsenitis was again given, with the same results as formerly. In this way he has suffered till now, slowly mending, however, and enjoying some ease during the late fine weather, but on any exposure to cold or damp, experiencing a severe recurrence of the pains, which are not limited to the lower extremities, but also attack the loins, muscles of the back, and arms, but are not accompanied with any swelling or redness. The remedy from which he has obtained most relief, has been mustard poultices, freely applied to the painful parts. The appetite is tolerable, the bowels rather costive.

September 19, 1844. Received a pretty strong current from the helix for a quarter of an hour, from the hands to the feet, passing consequently through all the parts that have suffered.

20 and 21. Repeated for twenty minutes.

22. Had a sharp attack of the pains, owing to the cold easterly wind which has set in. He used mustard poultices to the legs and loins, which have somewhat relieved him. In the afternoon I saw him in bed, and employed the electro-magnetism, as before, for a quarter of an hour; the pains ceased immediately, I then passed the electric stream along the spine for about ten minutes.

23. Was quite eased by the operation, but has had some pain to-day, and feels low. Repeat the treatment daily. At the end of a week he was quite well, and left off coming, and notwithstanding much exposure to the weather, and the prevalence of north-east winds soon after, he had during the winter and subsequently but one or two slight attacks of his complaint.

ON THE CEREBRAL CIRCULATION—THE COMPRESSIBILITY OF THE CEREBRAL STRUCTURE—AND THE BEARING OF THESE POINTS UPON SOME CIRCUMSTANCES IN DISEASES OF THESE PARTS.

By J. S. Fletcher, Esq., M.R.C.S.

There are many circumstances connected with the cerebral substance and the circulation through the cranium, which require to be again investigated by a mind seeking only after truth, and unbiassed by any preconceived opinions. One, and not the least important of them, is the subject of the "cerebral circulation" and the compressibility of the cerebral structure. On these two points the doctrines commonly held and taught are, I believe, erroneous, and on this as on many other points, I conceive that we have wandered from the truth in deviating from the opinions taught by the ancients, but after the most able and brilliant men in our profession, as Abercrombie, Copland, Alison, and others, who have adopted and taught doctrines in connexion with these points, differing entirely from those which it will be my object to bring forward in this short paper, it may be considered presumptuous in me to differ from them, and to bring these opinions prominently forward, but I believe that I shall be able fully to show that there are many strong arguments to be stated against their opinions, as well as others strongly favouring those which I shall endeavour to prove. It is very important that we should obtain a true knowledge of these points, in order that we may be the more able to explain and understand the phenomena of disease on some heads, concerning which it appears to me that there is some misconception.

In the course of my reading and studies I had often fallen upon the explanation of the cerebral circulation, and of the changes which occurred in it during disease, as derived from the experiments of Dr. Kellie, of Leigh; and it appeared to me a most beautiful part of the physiology of the body. So long as I confined myself solely to reading and reasoning upon the subject, I neither entertained a doubt that the cerebrum and cerebral circulation were excluded from the pressure of the atmosphere, that the quantity of blood or fluid within the cranium was at all times the same in amount, that the cerebral structure was incompressible, or that the mode in which the advocates of these opinions had endeavoured to explain through them various forms of disease occurring within the skull was correct; but, subsequently having met with a perfectly bloodless state of the brain after death from severe hemorrhage, which ought not to have been the case if the above opinions had been correct, I was at a loss how to explain it, and was from that led to seek after other cases which might throw some light upon the subject in question, and I am now very strongly inclined to doubt the truth of the opinions of Abercrombie and others on these points, and to believe, first, that the cranium is not a shut cavity, which protects its contents from the atmospheric pressure, and that, therefore, the brain and the cerebral blood vessels are under the influence of this pressure to a considerable extent; thirdly, that the amount of blood or fluid within the cranium is not at all times the same; and, fourthly, that the substance of the brain is, like every other organ, compressible, and capable of undergoing changes in bulk independent of the blood it contains. Opinions similar in many respects to these have been advanced by Dr. G. Burrows in some lectures published some years back in the journals; of the existence of these I was not aware at the time I commenced to observe the cases mentioned in a future part of this paper, but, finding them to correspond in a great measure with my own views, I have freely availed myself of the experiments detailed by him. I will first proceed to the examination of each of the opinions I have advanced.

The first is, "that the cranium is not a shut cavity, which protects its contents from the atmospheric pressure." Physiologists who have supported the opposite of this have brought forward but few and slight reasons for their opinions. They have assumed that the globular shape of the cranial bones is for the purpose of protecting its contents from this pressure, but to do this it should have been a perfectly shut cavity, without any opening into it, which, I contend, it is not; in fact, there are numerous apertures into the interior of the skull, as the sphenoidal fissures from the orbits, the numerous fissures and foramina at the base, as well as many others from the superior part of the skull, which give passage to small arteries and veins, all of which communicate with the arteries and venous sinuses in the interior, so that there is a continuous column of blood from within to without: and through any one of these openings, no matter whether small or large, I believe that the pressure of the atmosphere can be transmitted to the cranial contents, its size will matter but little, as will at once appear, when we call to mind the well known law in physics that pressure is equal in all directions; from this principle, were there no other opening than that small foramina which passes through the parietal bone, transmitting a vein to the superior longitudinal sinus, the atmospheric pressure being exerted upon the blood passing in through this, it would be transmitted to the whole of the contents of the cranial cavity, and there are many other openings larger than these. It may perhaps be said that the openings I have mentioned are closed up by structures which prevent or limit the pressure of the atmosphere; although there are some of them so closed, still there are many others which are not, some of which transmit fluid—as the blood—which fluid will be under this pressure, and will, therefore, transmit it to the interior, there to be equally diffused. Again, if the skull were a shut cavity, ought we not to expect a very considerable derangement in the state of the brain and the circulation through it, after the removal of one or several portions of bone by the trephine? This, however, is not found to be the case; for individuals after undergoing this operation are known to enjoy, very frequently, their usual state of health, exhibiting little or no difference in the state of the brain or its functions, and the whole seeming to work as harmoniously as before the operation. In the child at birth it is well known that there are two large openings—the fontanelles, over which a thin membrane is extended, and these remain open for the first portion of the child's life; therefore in this state there can be no doubt that it is not a shut cavity, and that here the brain bears exactly the same relation to the atmospheric pressure as the other viscera do. Seeing the truth of this in the child, and supposing for a moment that the opposite of this exists in the adult, we ought to have a very marked difference in the diseases of the two, and that exactly the reverse of the difference we find to exist; for if we have this pressure in the child, which is supposed not to exist in the adult, it ought to be a very strong obstacle to the determination of bood to the brain, and the child ought to be much less subject to cerebral mischief than at adult age—but we find that it is exactly the reverse. It may be said, perhaps, in answer to this, that the cranium will only admit a certain amount of blood in the adult, because its walls are unyielding, and the cerebral structure is said to be incompressible, but I shall detail cases where an excessive quantity of blood, both arterial and venous, was found in this cavity, and also facts which I think will show the cerebral structure to be compressible; therefore, were it correct that the cranium is a perfect sphere without an opening, the adult ought to be much more liable to cerebral disease than the child—which is not the case. The statement I have here been seeking to prove will be strongly supported by the effects, which I shall show, are produced by positive and other circumstances upon the cranial contents.

If, as I believe, I have succeeded in proving the first statement, there will be little left to say in support of the second, which is, "that the brain and the cerebral blood-vessels are under the influence of this pressure to a considerable extent;" for if the cranium be not a perfectly shut cavity, it follows that its contents will be subject to the atmospheric pressure. It is necessary, however, in order that this may be shown the more clearly, to explain that the contents of the cranium fill this cavity pretty accurately, so that any pressure acting upon any one of the openings acts almost immediately upon the contents. The pressure acting upon the column of fluid, the blood, passing through the numerous foramina in the cranium, will be communicated directly to the whole of the blood within the cavity, and will transmit this to the cerebral substance, pressure acting upon any one point will be transmitted through the whole mass, and will be equal at all points, but this pressure is exerted upon every part, from below through the blood passing by the carotids and jugular veins, and from above and laterally by means of many small openings by which blood passes to the sinuses, it would appear, upon a superficial view, that in the case of the blood passing to the sinuses, the dura mater would protect the brain from this pressure, as the walls of the sinuses will be in a great measure unyielding, but this is not so, as it must be remembered that the blood in these sinuses is a continuous stream or column with that on the surface and on the interior of the skull. The cavity of the cranium com-

municates with that of the spinal canal, and the blood-vessels supplying the contents of each are intimately connected with each other. The contents of the latter are, I believe, also under the influence of the same pressure as the brain, and were there no other communication than this, it would be sufficient to transmit it to the cranial contents.

As I believe the brain and the circulation through it to be under the influence of the pressure of the atmosphere, it appears to me "that the amount of blood or fluid within the cranium is not at all times the same." A number of experiments were made some years ago by Dr. Kellie, by bleeding animals to death, from which he drew the conclusions, that the quantity of blood or fluid is at all times the same within the skull; that this is not altered by bleeding animals to death, and that, therefore, bleeding has no influence upon the blood within the skull, that an excess of blood is never found within the skull, and that, if there be an excess of arterial, there is a diminution of the venous blood, or *vice versâ*, the excess of one making up for the diminution of the other. These views have been adopted by almost all our first physiologists and pathologists, such as Abercrombie, Watson, Copland, Clutterbuck, and numerous others, and upon them they have reasoned and endeavoured to explain various pathological conditions found in diseases of these parts. They were, I believe, first publicly called in question by Dr. G. Burrows, in the lectures I have previously mentioned. He repeated Dr. Kellie's experiments, and drew opposite conclusions from them I shall have occasion to detail several of these experiments. My own attention was directed to the subject, by the appearance which I have observed in cases of death from hemorrhage, some of which I will detail briefly. At the inspection of a man, who died from hemorrhage. "The whole of the viscera were quite bloodless; there was, in fact, hardly any blood in the body. The brain was quite as much drained as any other organ: the sinuses were empty as well as the cerebral arteries. There was no more than the normal amount of serum, and the structure appeared healthy." In another case—"The vessels of the dura mater were empty; when this membrane was removed, the whole of the vessels on the surface of the brain, except a few at the posterior part, were empty The sinuses were all perfectly empty, and also the arteries at the base The choroid plexuses were bloodless, and upon slicing the cerebral structure, it was pale, and contained scarcely any blood. There was about one drachm of serum in the ventricles, and about an ounce at the base of the brain." These statements I extract from the notes made at the time by myself; in neither of them was there any cerebral disease, and I am fully persuaded that were the head examined after death from hemorrhage, that it would almost invariably be found drained of its blood as much as any other organ. The appearances which I have observed in the preceding cases ought not to have existed if the conclusions drawn by Dr. Kellie had been correct; for if the skull had been a shut cavity, upon the contents of which the atmosphere could not act, this bleeding ought not to have drawn blood from the brain, but if the opposite state exist, these were exactly the appearances which we should expect to find. The serum found in the last case was only the natural result of the brain being gradually drained of its blood, and served the purpose of equalising the pressure on the cerebral structure, which is one of the uses of the cerebro-spinal fluid, which, in the normal state, surrounds the brain and spinal marrow. Magendie states that this fluid is never under two ounces, and often amounts to five ounces. It is diffused over the whole surface of the brain and spinal marrow, and gravitates in the latter being generally found at the lower part. This fluid is supposed by Dr. G. Burrows to vary in amount within the cranium in different states of the brain, there being at one time more in the cranium and less in the spinal canal; and this appears most probably correct, and I believe it to have occurred in the case I have detailed.

A careful inquiry into the experiments of Dr. Kellie upon which he founded his opinions, will be seen, I think, not fully to bear them out. I will briefly detail a few of them in Dr. Kellie's own words "Both carotids of a sheep were tied, and four minutes after the jugular veins opened. The quantity of blood lost was thirty-eight ounces, when the animal died. The heart contained no appreciable quantity of blood. The sinuses of the brain were in their normal state, those at the base contained less blood than had been found in similar experiments, and the veins in the hemispheres were less pallid; the choroid plexuses were pale and empty, the vessels on the basis of the cerebrum were better filled, and those on the basis cerebelli minutely injected."

In the second experiment, a dog was bled to death from the carotid, having lost thirty-seven ounces of blood. The lateral sinuses were, however, well filled. On the pia mater were several vessels of florid colour, but not tinged. The brain seemed upon the whole more depleted than usual."

I think it will now be seen that the preceding experiments do not fully warrant the opinion that the cerebral circulation is at all times the same, and cannot be affected by bleeding. On the contrary, if, to use Dr Kellie's own words, we have "the veins less filled," "the dura mater containing little blood," and "the brain somewhat more depleted than usual." it is but fair from these experiments alone to draw an opposite conclusion to that which he has advanced.

Proceeding with his experiments, we have one where "Both carotids and both jugulars were tied in a dog, an operation which it survived twelve hours. In this case all the sinuses were loaded with blood, and the vessels remarkably turgid; in short, he says, this brain was gorged with blood in all its minute vessels, and was obviously in a very different state of vascularity to those of animals bled to death." In another similar experiment he states, "The sinuses and veins were found loaded and congested, and the brain was everywhere turgid with blood. It is quite evident, he says, that this brain, and that in the former experiment, contained beyond doubt or dispute a much larger quantity of red blood than the brains of any of the animals which had been bled to death." He continues, "These comparative experiments afford us the most satisfactory proof that the other brains had been really depleted by bleeding, and their vessels drained of a very small proportion of the red blood usually contained by them." Yet after thus stating these results, we find him in another part of his paper drawing the conclusions that we cannot deplete the brain by bleeding, and that the blood is under all circumstances the same in amount, to which I contend that the results of these experiments are diametrically opposed; in fact, according to his own words, the brain had been depleted

I will next very briefly allude to similar experiments performed by Dr G Burrows. He states "That he killed two rabbits, the one by opening the jugular vein and carotid artery on one side, and the other was strangled The contrast between the two brains in point of vascularity was most striking. In the one killed by bleeding scarcely a trace of a blood-vessel was to be seen; in the other killed by strangulation, every vessel was turgid with blood." He also made other experiments, which were followed by similar results

Experiments upon animals are of the highest value to determine many points in physiology, but where we can find cases in which analogous experiments (if I may use the term) have occurred to the human subject, these appear to me much more valuable and conclusive, and having detailed two cases where the brain was drained of blood, proving that its quantity may be diminished. I will now bring forward the report of the inspection of the head in a case of simple apoplexy, as detailed by Dr. Francis, in the Guy's Hospital Reports, where there was undoubtedly a great excess of blood in the brain, without any rupture of vessel. "*Head*:—The sinuses were all enormously distended with blood, as also were the vertebral, basilar, posterior, cerebral and other arteries. The structure of the brain was intensely congested. The veins upon its surface were greatly distended, and on section, the dark fluid blood oozed up from the white substance like little fountains. There was no fluid in the ventricles or beneath the arachnoid, nor had any blood been extravasated. After the brain was removed, several ounces of blood flowed from the spinal canal and the base. In this case death occurred within five minutes of the time of the seizure.

A more striking case than the one just narrated, as showing an excessive quantity of blood in the brain would hardly be desired, there must have been at least several ounces of blood in excess over the usual quantity without the rupture of a single vessel or the slightest extravasation, and this excessive congestion must have come on almost instantaneously, causing severe pressure on the brain, and rapid death. Numerous other cases I could cite, but I will only relate one which fell under my own observation and which I inspected. A man previously suffering from slight bronchitis, without any indication of cerebral lesion, was one morning found dead in bed. Upon inspecting the head I found the whole of the vessels of the scalp greatly congested, when the calvarium was removed vessels of dura mater were excessively congested and sinuses full, vessels of pia mater greatly injected—a very large quantity of blood extravasated on posterior part of brain and the base where there was a very large quantity mixed with some serum; altogether the blood which flowed from the skull was computed by two or three present at sixteen ounces at least. The cerebral structure was greatly injected, and on the anterior lobe of the left hemisphere at the upper surface was a large cyst, at least the size of an orange, containing serous fluid, the cerebral structure being here destroyed.

(To be continued.)

HOSPITAL REPORTS.

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SECOND SERIES.

Reported by THOMAS FRANCIS PAXSON, Esq., of St. George's Hospital.

SURGICAL CASES.

CASE IV.

Case of Syphilitic Iritis.

John Bowyer, aged twenty-two, footman; admitted by Mr. Keate.

March 7. *Appearance of right eye.* All round the cornea, and extending up to its margin, where it abruptly stops, is a complete zone of fine, converging, straight, pink vessels, well-defined in front, but gradually shaded off behind The fibrous arrangement of the iris has disappeared; it is of a dark red, muddy colour, especially at the annulus minor, the inferior, internal edge of which appears ragged, and turned back towards the lens. The pupil is irregular, contracted, fixed, and motionless, and appears nearly blocked up with a layer of a milk-white substance. Vision is very imperfect, and the admission of light to the eye causes great pain and increased lacrymal discharge.

Left eye.—The straight pink vessels are only seen in patches round the cornea. The pupillary margin of the iris is slightly discoloured; but does not appear to be adherent to the lens. The rest of the iris retains its fibrous appearance and natural colour. The pupil is not so much contracted as in the other eye, nor is it blocked up with lymph. The pain and lacrymation are also much less.

There is an eruption of small, red papulæ, on the face, chest, back, and arms. And near the frænum præputii is the cicatrix of a former sore.

The patient has a quick pulse, foul tongue, much thirst, and nocturnal pain in the head.

His own history is, that three months ago he contracted a sore; about three weeks ago the eruption appeared, with slight inflammation in the right eye; that within the last week it has become much more inflamed, and the left eye has also become attacked.

Calomel, gr. v, statim; H. sennæ, ℥ iss postea.
Calomel, gr. iij; Opii, gr. ¼, bis die.
H. ammon. acet., ℥ iss, bis die.
Calomel, gr. xx; Aq. destil., ℥ j pro. collyrium.
Ext. belladonnæ to be applied round the eyelids.

14. Gums beginning to be affected; pulse natural; tongue clean; thirst gone; eruption fast disappearing; circum-orbital pain much less severe,

so that he can obtain good rest at night. The pupil of the left eye is now of its natural size; the iris has regained its former appearance, and the redness of the sclerotic has disappeared. In the right eye also, the injection of the sclerotic is nearly gone; the iris has partly recovered its healthy fibrous appearance, except at the pupillary margin, which is still muddy from the effusion of lymph. The adhesion to the capsule of the lens still remains. Pupil still irregular and contracted; but the quantity of lymph in it is very much lessened.

Perst. in remediis.

20. He has now lost all pain, in and around the eye; the pupil is becoming dilated, but is not yet of its natural size; the lymph has entirely disappeared from it. The fibrous appearance of the iris is returning, and it has nearly regained its natural colour; but there is still some adhesion of the inferior part of the annulus minor to the lens. The gums are now very sore.

Perst. in pil. omni nocte tantum. Perst. in belladon. et collyr.

28. There are only a few points of adhesion now remaining between the iris and the capsule of the lens, and the pupil has now nearly regained its proper size. He now complains of great weakness. Pulse small and feeble.

Omit. pil. cal. Perst. in belladon. Pil. hyd. bichl., gr. ij bis die.

April 4. The adhesions are all broken down, and the pupil is of equal size with the other.

To be an out-patient, and continue the occasional use of the belladonna.

REMARKS.

Iritis acknowledges various causes. It may arise from constantly looking at small or bright objects—as with needle-women, artizans, &c. It may be caused from surgical operations on the eye. It may appear in connection with rheumatism, when it generally recurs with each attack, but is not so severe as the next form. Syphilis is the most frequent cause of iritis; it occurs as a secondary affection, and in connection with other secondary symptoms. It is generally more severe, and attended with more pain—especially at night—than the other varieties.

The present case is a remarkably instructive one of syphilitic iritis. In the left eye the symptoms were seen in their earliest stage, the pupillary margin only of the iris being affected; the sclerotic vascularity was only slight; the pupil was not much contracted, nor was there much pain.

In the right eye the symptoms were farther advanced; there was great injection of the sclerotic vessels, which were seen to dip through the sclerotic to go to the iris; the fibrous arrangement of the iris was lost, and it was of a dark muddy colour, particularly its pupillary margin, which at its lower part was retracted towards the lens. The pupil was irregular, contracted, and nearly blocked up with an effusion of coagulated lymph. There was increased lacrymation, and very severe pain, in and around the eye, which was very aggravated at night. Vision was impaired, partly from the presence of lymph in the pupil, partly perhaps from slight inflammation of the posterior tunics, and also because the iris was unable to regulate the admission of a proper measure of light to the retina.

There was also some inflammatory fever present, and an eruption which generally indicates some degree of power or tone in the system.

Had he not now been put under the influence of proper remedies, in a short time there would have been greater external vascularity; the pupil would have become more contracted, and the iris projecting towards the cornea; small abscesses would then have formed on it, which would have burst, and the pus would have escaped into the anterior chamber, forming hypopion. The cornea would have been dull coloured, and vision lost, from the retina becoming affected; or the patient might have seen occasional flashes of light, shewing that the disease had extended to the choroid membrane. The pain would have been intolerable; at last the anterior and posterior chambers would have become obliterated, followed by atrophy of the whole globe.

Although the inflammation had lasted for a considerable time in the present case, a favourable prognosis was formed, because the disease had only been acute for the last few days before his admission; there was only a thin film of unorganised lymph in the pupil, which was not contracted to more than its medium size; there were no pustules on the iris, nor did it project forwards; the cornea was clear; and there were no symptoms, or but very slight ones, of the internal tunics being affected. But had the disease proceeded a degree farther, of course the prognosis would have been very guarded, and most probably unfavourable.

Syphilitic iritis requires to be distinguished from several other diseases of the eye. The present case differed from rheumatic iritis, which comes on suddenly, and with very great severity in the first instance, often attacking both eyes in an equal degree at the same time; it would also wear itself out with simple loss of vision, without treatment; whereas, the present form would be almost sure to go on to destruction of the whole globe.

Although inflammation of the capsule of the lens partly resembles iritis, yet it is more slow in its progress; the pain is much less, and is limited to the situation of the capsule itself.

Had it been retinitis, it would have come on much more suddenly, the pain would have been much more insufferable, and vision would have been lost in a much shorter time.

The inflammation in the left eye partly resembled aquo-capsulitis, in the sclerotic vessels being injected in patches round the cornea, and in the dull pain in the forehead; but it wanted the muddiness in the anterior chamber, the fulness from increased secretion, and the mottled, milk-white spots on the internal surface of the cornea, which are the distinguishing marks of aquo-capsulitis.

Had it been corneitis, the cornea would have been opaque, with red vessels ramifying over it; there would also have been less pain, and perhaps the pupil might have been seen through it, moving in its natural state. The two diseases may, however, be sometimes conjoined.

There is always a certain amount of sclerotitis attendant on iritis; it is, however, much more prominent in the rheumatic than in the syphilitic form; but the degree of pain and the severity of the affection in the iris and pupil left no doubt—with the concomitant syphilitic symptoms—that the affection of the sclerotic was only symtomatic.

The straight, converging form, and pink colour of the vessels of the sclerotic, plainly distinguished it from inflammation of the conjunctiva, where the vessels are tortuous, anastomosing, and of a bright red colour.

In the treatment of iritis there are three principal remedies which must be employed, viz., blood-letting, mercury, and belladonna.

The first remedy alone will not *cure* the disease; it will only put a stop to the inflammation, but will not remedy the mischief which has been already done. It is chiefly necessary in the rheumatic form, where there is much pain, fever, and hardness of pulse, with other symptoms of severe constitutional disturbance present.

Mercury is the remedy on which we must always rely, both to procure the absorption of that lymph which has been already effused, and to prevent the effusion of more. It must be introduced rapidly and in large doses, so as to affect the system as soon as possible. It is extraordinary and beautiful to see the reparative process commence directly the capillary system feels the influence of the remedy. The zone of sclerotic vessels begins to fade, the lymph disappears, the iris again becomes bright, and the pupil gradually circular.

The mercurial influence must be continued until the lymph has disappeared, and the natural colour of the iris returned. It may also be used locally to hasten absorption, or remove the severe hemicrania which is often present.

Belladonna is employed to dilate the pupil, and prevent its tendency to contraction and adhesion to the capsule of the lens. The extract may be smeared on the eyelids, or a solution of it dropped into the eye. Mr. Mackenzie says, that the evening is the best time to apply the belladonna, because during sleep there is a natural closure of the pupil, which favours the permanent contraction that iritis tends to produce.

Of late years a new medicine has been introduced for the cure of iritis, by Mr. Hugh Carmichael, of Dublin. It is the oil of turpentine, given in one-drachm doses three times a-day.

It is recommended in cases in which mercury is not admissible, on account of the patients being in a state of cachexia, or where mercury produces an injurious effect on the health. It seems to excite the action of the absorbents in the same way as mercury, but as the latter is the more certain remedy, it will never be superseded by the turpentine, where the state of the system allows of its administration.

In the treatment of the present case the general symptoms, though severe, did not appear to render the employment of blood-letting necessary; indeed it is seldom necessary in syphilitic iritis. The local affection, on the contrary, was progressing with great rapidity, and called for the speedy employment of those remedies which are known to be most efficacious in promoting the absorption of effused lymph.

Calomel was accordingly given in large doses at regular intervals, and combined with opium, to prevent it running off by the bowels, and to ease the severe pain which he endured. At the same time mercury was employed locally as a counter-stimulant and absorbent. The belladonna soon caused the expansion of the pupil of the left eye, in which the disease was comparatively slight, but in the right eye it did not seem to have any effect until the inflammatory symptoms had considerably subsided; then its good effect was immediately seen, by the pupil becoming gradually expanded, and by the adhesions between the iris and lens being broken up, though no doubt the latter effect was chiefly owing to the mercury.

As it was necessary to keep up the specific action of the mercury for a long time, the bichloride was given in place of calomel, in order to keep up a gentle action without lowering the system. The use of the belladonna was ordered to be continued after he left the hospital, in order to obviate the tendency to contraction which is often observed after the other symptoms have ceased.

KING'S COLLEGE HOSPITAL.

Reported by HENRY SMITH, Esq., House Surgeon.

INJURY OF THE ARM.

William Hitchcock, a man of middle age, a pretty free liver, and following the business of omnibus driver, whilst getting up to his box, fell on the pavement, with the whole weight of his body, upon his right arm. This happened on the evening of the 18th of June. On the following morning he came to the hospital. I found the whole of the forearm greatly swollen, as well as the elbow and lower part of the upper arm. He complained of excruciating pain. Thinking that there must be a fracture from the exceedingly severe nature of the accident, I handled it rather roughly, but, after the most careful search, I could find no indication of one. As the man lived in the neighbourhood, and was in pretty comfortable circumstances, and King's College Hospital was very full, I sent him home—directing him to carry his arm in a sling, and apply cold constantly.

June 20. His arm was still exceedingly swollen and painful, but free from much inflammation, except at one spot, of about four inches in diameter, just over the middle of the anterior surface of the forearm. Here the skin was much inflamed, and sloughing had already begun. There was also some constitutional disturbance. On inquiring more minutely, I found that, as soon as the accident had happened, his wife had applied some water rather uncomfortably warm to the middle of the forearm, and since that he had felt more pain in that spot. In other respects the arm was rather more comfortable. The ecchymosis from the scapula to the middle of the forearm was most extensive, showing the amount of contusion which must have taken place. I ordered the part where the sloughing had begun to be poulticed, the whole limb to be dressed with warm water fomentations, and a purgative to be taken.

21. The limb is less swollen, but still very painful. There is a deep and extensive slough over the middle of the forearm. The integuments

around the slough look unhealthy, and there is a foul, dark coloured discharge coming from two or three orifices in the slough; the pain is severe, and the constitutional disturbance is great; the tongue is foul, and the aspect rather anxious. As I expected the sloughing process would extend, and that the matter pent up under the skin would cause further mischief, I introduced a curved bistoury through the slough, and carried it deeply under the skin in two or three directions, and thus made a free exit for the slough and matter. I found that the sloughing had extended to the deep fascia of the arm, and the cellular tissue under the apparently healthy integument was destroyed. The part was ordered to be constantly poulticed, and nourishing diet was prescribed.

26. He is much easier in every respect; the slough has mostly separated, and no other part has been involved; although there is a large surface bare, it looks well. The swelling of the arm has subsided; but the inability to use it is great; his general health is better; he comes to the hospital every other day.

July 1. The arm is getting stronger; there is now a clean, but extensive ulcer; the ecchymosis continues very extensive, but is subsiding somewhat; the sore to be dressed with water-dressing, applied by means of folds of muslin.

12. I saw this man to-day; the sore has been gradually contracting, and the arm is getting stronger daily; he is incapable of using it to any extent yet. As the granulations in the sore were rather languid, I applied the nitrate of silver, and ordered it to be dressed with a lotion of sulphate of zinc.

15. The arm is now reduced to its natural size, and there only now remains a healthy sore about he size of half-a-crown, which is rapidly filling up.

REMARKS.

The points of interest in this case appear to me to be, the non-occurrence of fracture from such a severe amount of injury, as a very heavy man falling from the top of an omnibus on his arm; and the severity with which the hot water acted upon a portion of his skin, which had had its vitality much impaired, by great contusion of its blood-vessels, as the enormous amount of ecchymosis indicated. In making the long and deep incisions, before the slough was ready to separate, I perhaps acted against the principles of surgery; but as I was unaware of the further mischief that was going on, I thought it right to act as I did, and the issue of the case, I think, shows that the use of the knife was not premature.

REVIEWS.

On Disorders of the Cerebral Circulation, &c. By GEORGE BURROWS, M.D., late Fellow of Caius College, Cambridge; Fellow of the Royal College of Physicians, London; and Physician and Lecturer on the Principles and Practice of Medicine at St. Bartholomew's Hospital. London. Longman and Co.

In this book there is more ingenuity than practical ability. It is a series of speculations and reasonings brought to bear upon various interesting and important points of pathology and practice. Almost every form of perverted cerebral function is attributed by our author to what he terms "*vascular pressure*"—a phrase whose meaning is so capriciously denoted, that the reader fails to attach to it any definite idea. This "vascular pressure" is sometimes treated of as an effect of the heart's action alone, sometimes of vascular congestion, sometimes of the ordinary pressure of the blood in its vessels; and at other times it is a result of all these forces in their aggregate operation. When a phrase is permitted to embody so many distinct ideas, there can be no difficulty in employing it cleverly for the purposes of argumentation. If a previous writer assert that certain symptoms have their origin in "congestion," it is easy to cast a doubt upon the opinion, and affirm that they depend on "vascular pressure" subordinate to augmented cardiac impulse: if, again, these symptoms should be attributed to the pressure of effused fluid, &c., the same phrase is ready to do service under the banner of "congestion."

Medical men, however naturally acute, are singularly illogical in the use of words, and consequently in the conduct of argument, and hence have arisen such a multitude of theories as have, from time to time, captivated the indulgent credulity of the profession. Dr. Burrows is certainly no exception to this general affirmation. Rejecting much of the hypothesis which is more becoming a cloister than the wards of an hospital—the pedant than the physician—we can still render due and merited praise to several observations as they refer to points of pathology.

The following remarks are just:—"In those pathological states of the encephalon where there is an increase in the quantity of solid matter within the cranium, and a diminution of the quantity of extra-vascular serum, as in hypertrophy of the brain, tumours and cysts in that organ, and in large extravasations of blood on the surface, every cause which is capable of *exciting the heart's action* produces a notable increased disturbance of the functions of the brain. The variable character of the symptoms of cerebral disturbance, in these permanent lesions within the cranium, are thus probably accounted for by the variable vascular pressure." (p. 59.) The author continues to say that he doubts if these permanent lesions—unless in cases of mechanical injury—affect the functions of the brain by pressure, unless there is *vascular congestion*. Here we see that the phrase vascular pressure comprehends a duplicate cause. The author is evidently too ready to substitute effects for causes, in his anxiety to force a favourite expression upon our adoption. His hobby damages the book. We are quite willing to admit that vascular pressure may and does seriously affect the functions of the brain; but we think it would have been more philosophical, and far more useful, to have determined with more precision the value of the various causes producing such "vascular pressure." At present it is little better than an unphilosophical play upon language.

Dr. Burrows thus defines syncope:—"Syncope is occasioned by insufficient vascular pressure on the brain, and not from the inadequate quantity of blood supplied to the brain and its vessels, as is commonly supposed." He wishes to show that the proximate cause of syncope is a diminution of vascular pressure dependent upon an enfeebled action of the heart—in fact, a deficiency in the momentum, and not in the quantity of the blood in the brain. The assumption is disputable; especially as the author has, in the early part of his book, disproved, with much success, the old notion that the quantity of blood in the brain must be always necessarily the same.

Of anemia, the doctor says, "It is unnecessary for me, particularly, to describe the remarkable disturbance of the functions of the brain, which takes place in general anemia. Does the long catalogue of nervous symptoms arise from the altered qualities of the blood in anemia, or from an insufficient quantity of blood in the cerebral substance, or, lastly, from impaired vascular pressure on the substance of the brain? It is needless that he decides, "rather from an insufficient vascular pressure than from an insufficient quantity of blood in the substance of the brain." Vascular pressure is mighty magic in the hands of Dr. Burrows—epilepsy, tetanus, mania, all may be caused or cured by a proper attention to vascular pressure. The circulation is a sort of steam engine, supplied with pipes and valves in beautiful adaptation to the business of life, and all we have to do is to let the steam off or put it on, until we have obtained the exact amount of vascular pressure, and we shall steer triumphantly amidst all the quicksands of disease!

Dr. Burrows quotes Dr. Abercrombie, who having related a case of deafness, which was either augmented or relieved, as the patient assumed the erect or recumbent position, supposed that it was owing to "a want of balance in the circulation within the brain, a diminished quantity of blood, and momentum of blood in the cerebral arteries, with a corresponding increase of the blood in the cerebral veins." Dr. Burrows thinks it "rather shows that the varying amount of vascular pressure was the cause" of these alternations. But what, may we ask, was the cause of the varying amount of vascular pressure but a varying amount of blood within the brain? Dr. Burrows' criticism savours too much of captiousness to be just; and, in fact, it can scarcely be otherwise, when distinctions are drawn that nature does not recognise, and when words are employed to supplant ideas.

Towards the end of the volume there is a collection of cases, showing the complication of affections of the brain with diseases of the heart. Dr. Burrows considers these affections merely symptomatic of the disease of the heart, and caused by disturbance of the vascular pressure. We differ from him. We have in our possession a variety of cases observed years ago, bearing on this point, and we are convinced that many more of such affections are actual lesions of the cerebral organ than are usually supposed. These cases should be more narrowly watched, and their pathological states more carefully recorded. In fine, we commend this volume for its ingenuity, for the clear manner in which it has unfolded the conditions of the cerebral circulation, and for establishing its variability; but we protest against the undiscerning bias by which a very simple proposition is sought to be converted into a law.

The Health and Sickness of Town Populations, considered with reference to proposed Sanatory Legislation, &c. 8vo, pp. 119. London: John W. Parker.

This pamphlet is for the most part a re-print of an elaborate article on Medical Police that appeared in the 13th No. of the *New Quarterly Review*. It consists of statistical and other evidence, tending to show how badly the present scheme of pauper and such like medical relief answers, as well to the receivers as to the givers thereof. It states, what ourselves have often stated in these pages, that if parish and poor-law medical officers were better paid, the indigent sick would be greatly benefited and the Government honoured thereby. No men do such hard and hazardous work gratuitously as medical men, and no men are so poorly paid as they are for those public services which ought to secure to them liberal compensation. We grieve over the present injustice of things, but we mean shortly to prime our editorial pen, to make an unhesitating appeal against these abominations.

Instructions for making Unfermented Bread; with Observations. By a Physician. 8vo. pp. 15. London: Taylor and Walton.

This is an interesting little *brochure* upon a subject particularly important to invalids and dyspeptics. The desirableness of good bread is well enough known to all who are in the habit of prescribing or eating it—and the difficulty of getting it is a fact quite as notorious. Baker's bread, it is well understood, is so much an artificial matter as often to compromise the health or comfort of those who use it. People like to see it white and spongy, and what can the poor baker do better than answer these popular *desiderata* by an extra magnum of yeast, a dose of alum, and as much chalk or plaster of Paris as may be necessary? Yeast, again, often fails; and a sort of apologetic fermentation is established amongst smashed potatoes to furnish material wherewith to raise the forthcoming batch of baking. It is self-evident how perplexing to ordinary stomachs must be filthy, heterogeneous compounds like these. But "home-baked" is not free from objections. If the yeast happen not to be good, and it rarely fails to be other, then the forthcoming bread will be sour, or heavy, ropy, or stinking. Again, we know that fermentation is a communicative process, and that once having commenced, it is apt to proceed until all the fermentable material has changed its qualities. Thus, the difficulty of keeping bread in hot weather, or when the yeast or flour is impure.

It being understood that the only value attached to the fermentative process is the evolution of carbonic acid gas, it occurred to chemists to think that this gas might be diffused through the dough by other means than by yeast. Confectioners, as is well known, are in the habit of giving a

"puffiness" to their paste by the intermixture of ammonia with it. The elevation of this into vapour, by the heat of the oven, not only carries it all off, but leaves the material through which it has passed light and porous in consequence. This process would be too expensive in ordinary, and therefore it has been proposed to substitute for it the evolution of carbonic acid gas by the admixture of muriatic acid and bicarbonate of soda. In this way, the good offices of a fermentative are secured, at the same time that the "salt," requisite for seasoning, is provided. In the pamphlet before us, these important domestic and dietetic facts are set forth.

To make white bread, the author advises to—

"Take of flour, dressed or household, three pounds avoirdupois; bicarbonate of soda, in powder, half an ounce troy; muriatic acid (sp. gr. 1·17) five fluid drachms; water, about twenty-six fluid ounces; salt, two-thirds of an ounce troy."

To make brown bread:—

"Take of wheat meal, retaining the whole of the bran, three pounds avoirdupois; bicarbonate of soda in powder, four drachms and one-third troy; muriatic acid (sp. gr. 1·17), five fluid drachms and twenty-five drops; water, about thirty fluid ounces; salt, two-thirds of an ounce troy.

"First mix the soda and flour as thoroughly as possible, which is best done by shaking the soda from a small sieve over the flour with one hand, and stirring the flour all the while with the other. In general this will answer sufficiently; but the end will be attained more certainly if the mixture be passed afterwards, once or twice, through a sieve. Next, dissolve the salt in the water, and add the acid to it, taking care to perfect the mixture by stirring them well together. Then mix the whole intimately as speedily as possible, using a wooden spoon or spatula for the purpose. The dough thus formed will make two loaves somewhat larger than half-quarterns. They should be put into a quick oven without loss of time. This is most conveniently done in large tins. The oven should be made hotter than for common bread. A portable one, where there is no other, and a common fire will answer the purpose. About an hour and a-half will be required for the baking."—pp. 6—7.

Knowing, as we do, from experience, personal and professional, the value of bread "raised" without ferment or leaven, we have much pleasure in laying the above formula before our readers; believing that to many, if not most of them, its adoption will prove beneficial.

For the pamphlet itself it is discreetly written, and contains many observations that may be read with advantage by all to whom the subject of dietetics is a consideration.

TO CORRESPONDENTS.

To An Advertiser *in particular, and to all advertisers in general.—The Lancet is defunct as an advertising medium. Messrs. Simpkin and Marshall, who, before the change in the shape of that journal, took between* 1000 *and* 1500 *copies a-week, now take less than* 325. *Messrs. Longman, who used to take over* 1000 *copies, now take* 200. *There is something peculiarly frightful in the rapid downfall of a journal that once enjoyed a very tolerable circulation. The* Medical Times *delivers from its own office at least the double of the whole circulation of the Lancet. Gentlemen wishing to form a notion of the amount of copies sent out by us weekly, should present themselves at our office on a Friday evening at a quarter after four o'clock.* ⁂ *Although we have known these facts for a considerable period, our publisher would not, even thus late, have noticed them if he had not been offered a very unnecessary amount of provocation.*

Mr. Martin's *request has been attended to.*

A Lunatic's Friend.—*We can give under present data no opinion on the subject discussed. Our correspondent, who positively authenticates his statement with his name, broadly affirms that, however Dr. Conolly can compile on the theory of lunacy, his knowledge of its practice is far more limited than that of Dr. Begley, to whom our correspndent attributes all the practical improvements in Hanwell. If "A Lunatic's Friend" will publish his name to his long statement, it shall appear. We think, however, that the success or failure of the University professorship is very unnecessarily obtruded into the paper.*

A Publisher *is informed that the* Medical Times *has more subscribers to its own office than all the other medical journals united obtain through their booksellers.*

A Student *may read Noad's Lectures on Electricity with advantage.*

X. Y. *should consult our Pharmaceutical Numbers.*

A Medical Practitioner *is informed that assurance societies shall have our early attention.*

Discipulus *has made a mistake.*

A. H. B., Stoke Newington, *has sent us an elaborate criticism on* Trichodyschroia and Trichocrosology. *We regret that we could only insert our correspondent's clever article at the risk of drawing attention to a paper which, without such aid, will remain as at present placed, in deserved obscurity. Any thinking man, who may chance to read the article in question, will see the absurdity of the chemical formulæ given. We can only wonder with* A. H. B. *"that the editor continues to insult the few remaining readers of his journal by admitting into its columns the ravings of every madman who labours under the cacoethes scribendi."*

We can only insert Mr. Ruck's *letter as an advertisement.*

Sincerus *is not remarkable for frankness. Had* Sincerus *written avowedly as a homœopathist, and with his name attached to his communication, his article would have had a better chance of insertion in the* Medical Times *than he has under his present disguise.*

The reports of the Manchester Eye Hospital in our next.

Several communications have been received, and are under consideration.

THE MEDICAL TIMES.

SATURDAY JULY 18, 1846.

Arma, virumque cano. –VIRGIL.

As MEN may be known by the worth of their associates, not less so may institutions by the character of their rulers. Whole systems are epitomised in their official exponents, and Lawrence mentioned as the president of the College of Surgeons carries a terse damnation to the body more expressive than all the phillippics that have yet darkened the columns of the press. If there have remained one surgeon with a gleam of favour for the College yet struggling in his breast, how must this one fact overcast for ever the charitable ray! Lawrence, the apostate reformer—apostatising, too, for place — Lawrence, the secret slander writer of the Lancet in its worst days—Lawrence, the renegade upholder of a spoliating charter — Lawrence, the Hunterian orator of audacious celebrity—the president of the Surgeons of England! We have to re-word the startling proposition to give it credence. Reflecting on the enormity of the Council's injustices, we had imagined that the cup had been filled to the brim—the climax reached with deplorable perfection; but these persons have a perverse item of cleverness. Their corporate lunacy carries with it an inventive cunning of wrong that suggests to them heights of folly unscanned by ordinary judgments. Other people's *worst* can be little more than their beginning, when the success of an infamous system was nothing, if they had not secured the corporate triumph of its most infamous impersonation.

What can be the meaning of this strange outrage? Injury, capped by insult, has been the only consistency in the Council's past conduct; but why, now, this needless iteration of both in concentrated excess? Are these foolish men so bent on lowering their brethren that they will stoop to new depths of ignominy themselves, rather than fail in their purpose? If *we* must be injured by disgraceful charters, is there any necessity that *they* should be polluted with the presidency of the Chartist orator? Can they not damage us at a less price than their own submission to a Lawrence? If they have no regard for us, are they without shame for themselves? Excepting one man—his former associate—where is the individual who has stood worse in public opinion? Where is the feature, moral or professional, that has secured him one atom of public respect or confidence. Why, then, uplift so high the evidence of their own official unprincipledness and corporate degradation? As a surgeon, with the exception of some theorising ingenuity, where are the high qualities which should hover round the chair of an Abernethy? What, but a feeble, commonplace practice—what, but a meagre and retrograde teaching, have the highest position and opportunities succeeded in educing? If we turn to his attempts to apply physiology to the moral sciences, how quickly does the daring philosopher merge into the astute jack-pudding eating his own sword to please Bartholomew-fair lookers-on? Consider him as a medico-legal politician, and where in public annals can you find an exemplar of equal turpitude on smaller temptations? His public conscience has been hourly on sale at any price. There has never been a day, since his apostacy was worth a bid, that it has not been in the market *à bas prix*. In the contemptuously small circle of collegiate politics he has achieved in miniature as complete an infamy as the most unprincipled statesman with a world for his arena. *He could not have played a worse public career had he tried.* When, again, a now all but extinguished journal revelled in the repute of disparaging every clever, and persecuting every good, man—when it anticipated the obscenities and out-Heroded the slanderous personalities of its successor in repute and circulation, the *Satirist*—who then was it that shielded in congenial darkness, worked the infamous machinery in private, pouring unseen on the dinner companions and confidential friends of one hour the obscene calumnies of the Lancet the next? The social pirate thus sailing under false colours was Lawrence! The literary Thug, thus taking his victims at an unmanly advantage, is the present President of our Surgical Council! The charge is hideous; no gentleman can tolerate it; yet it is neither untrue, nor exaggerated. The partner in this disreputable warfare has peached on his more successful comrade, and has placed before offended justice conclusive evidence that the now specious member of respectable society has been a comember of the infamous banditti. Wakley—the Peachem, the Jonathan Wild, of the press—always looking forward to the safe *rôle* of Queen's evidence—had in hours of mutual confidence stored up, in his comrogue's hand-writing, evidence of the damning partnership, and, after twenty years' careful preservation, has fully placed it before justice. The fact is clear, and not to be gainsayed:—*Wakley's collaborateur in Lancet assassinations of character was the present President of the College of Surgeons!*

But we need not dwell on such matters for proof of the monstrousness of this appointment. The very Council, selecting their chief but a few months since, publicly declared him unfit for any corporate office. They passed on him a vote of censure, *with the wish and the view* that he should at once give in his resignation. Rather than not testify publicly, and on the first occasion, to their desire to get rid of him, they violated both law and propriety in their mode of doing it. They censured him for doing what they had instructed him to perform, censured him in a manner which their charter does not sanction, and they furthermore publicly notified their censure and condemnation. How happens it, then, that this droll Council thus—unnecessary process—stultify themselves, that they one day elect to their highest post the very man they had just proclaimed unfit for any? Must we explain the absurdity in the only way that gives them credit for a deliberate purpose—that they will run into any depth of wrong and folly to add one more annoyance to their unfortunate members?

Why should we refer to that unfortunate and miserable scene, where a professional teacher in a scientific arena took so vulgar, so cock-pit a notion of his character and duties, that the more he played in public the *rôle* of a Billingsgate bully to scholars and gentlemen, the more he fancied he was doing honour to the memory of a great scientific discoverer, and service to the aims of a benevolent college founded for the diffusion of a benevolent knowledge? Would that we could forget the horrible desecration! But, no! the rankling sore must be again reopened with violence, that the perpetrator of the daring outrage may be advanced to scientific eminence!

The time has come when one remarkable phrase uttered that day will have its truth tested. We were called—with some effrontery, certainly—"geese;" and the present election seems much of an experiment to try how far we deserve the epithet. Had the geese been less plucked by the useless avarice of this audacious Council, we might have entertained some fears, that by apathy and submission, they would still continue to show their revilers the white feather. But stripped of everything, and by this last act defied to do our worst, the members have nothing left for it but to show a vigorous fight. A fortnight ought not to pass before the Home-office should be filled with memorials, asking for the removal from his high office of the private slanderer of individuals and the public calumniator of a profession. British surgery is put to the blush while a Lawrence is advanced as its chief.

Nosse omnia hæc, salus est adolescentulis.

TERENCE.

HAVING treated of the advantages unworthily enjoyed by the army over the medical profession, we come now to compare ourselves with the clergy.

Be it understood that we approach this subject without the smallest feeling of irreverence or levity; on the contrary, we fully appreciate its seriousness, and desire to discourse upon it with whatever propriety we can. For the clerical profession, *per se*, we entertain the profoundest regard; and, in the *abstract*, are far from disposed to trouble ourselves with an estimate of the fortunes, faults, or other characteristics of its disciples. It is only in a *relative* sense that we view these things, and with the object of showing, that, if parsons do not generally fare better than they deserve, doctors, in comparison, fare very much worse. Why such injustice should be, is to us quite a matter of mystery; and it is to give such injustice the full benefit of exposure, that we deal with it thus openly.

In comparing ourselves with the soldiery, we were not able to discover any inferiority on our part, either in moral or physical courage, but rather the converse; we avoided the intellectual comparison, for we had no desire to take advantage of the contrast. In comparing ourselves with the clergy, we have no fear of exhibiting a subordinate character.

The two great things that ought to distinguish a parson, are—*mind* and *morals*. Absolute *piety* is rather too deep a subject to dip into; for though, in our old fashioned way of thinking, no man has any right to pretend to preach the gospel without it, yet we fear it is seldom now-a-days considered a *sine qua non* to church preferment. Not to deal, then, too hardly with, or expect too much from, the particular cloth with which we are about to compare our own, we will consider the resemblances, or the differences, solely on the side of intelligence and morality. And in this, we apprehend there is nothing of unfairness to our seemingly more serious brethren; for it is much pity if they do not surpass us in subjects which they get so well paid for cultivating. We do not mean to say that stipendiary virtue is good for nothing; *but we do mean to say*, that, when propriety is purchased of a man, he is doubly a rascal if he withhold it; and that, of two men pretty equal in moral decency, he is the better whose goodness exists independently of gain, and who pursues a line of strict rectitude, not because his profession and pocket require him to do so, but because his heart whispers that *such is his duty*.

Now, to deal with the two parties after their intellectual comparison, let us ask whether more talent or acquirement be a necessary preliminary to putting on a priest's than a doctor's gown? Accustomed, as we have been, to watch a university curriculum in all its phases, we can confidently say, that, if there be a difference in severity, it is that the preponderance is on the side of physic. There is nothing in classics, mathematics, logic, and the like, required of the candidate for the pulpit, that is not also required as a prelude to a medical doctorship. The sciences, again, that are auxiliary to medicine, are a terrible addition to the duty devolving upon its student. Botany, Chemistry, Materia Medica, Anatomy, Physiology, Natural History—to say nothing of Surgery, Midwifery, Jurisprudence, &c., are so many extras to what belongs to a master of arts degree. Of these, the student of divinity is not expected to know anything worth a mention—and is therefore as ignorant of them as of the geology of the moon, or the altitude of the fallen angels. With the exception of a little musty theology, a bit of something about Paley, and a turn or two more at genuflexion, the student of divinity not only grapples far fewer subjects than the student of medicine, but comprehends none that the latter is not obliged to acquaint himself with. This statement is founded upon the routine of study prescribed by the examining authorities for the respective candidates.

We are not for a moment objecting to the rules of study thus laid down, because we think them wisely adapted to the future requirements of the two parties. The duties of the parson are much more compendious, common-place, and constant in their character, than those of the physician. At the best, to make a comment on some plain, intelligible scripture passage, is no very hard task to a man who has little else to do; is well-paid for doing it; and with lots of authorities to tell him how it is to be done! Very few are the tomes required to be turned over, ere the orthodox creed be learnt—and nothing remains but to write it down. Take the majority of sermons you hear, and they are nothing better than school exercises. We are not contending against their simplicity—on the contrary, we like it—what we mean is, this simplicity is usually reached by very simple heads, and with very little trouble. But this is not all. Because a man *reads* a sermon, it does not follow that he has written it. The ready-market, that "ready-made" compositions of this kind meet with, is proof enough how few are the ministers who manufacture their own! This, again, we are not complaining of—we would infinitely rather hear a thick-headed fellow read a wise man's discourse, than perform a freak of rhetoric upon his own. But, at any rate, we learn from the fact, how easy a thing it is for a man in the pulpit to carry on business with another's capital, and nobody be the wiser for it. A species of literary larceny may thus be perpetrated without a blush, and the pilferer gain the credit of erudition and severe industry. We wonder how many have fared well upon this false credit, and made it the vehicle of fame and fortune! No such plunder as this is practicable in physic. Our discourses are all extempore—nothing stolen—nothing got by rote! The bedside business is a plain question of what is the nature of the disease? how is it to be treated? is it fatal in its tendency? Here is no trading with another's capital; no borrowing from another's store. There are signs and symptoms before you—they may be mild or mischievous—answer at once—it is a question of yea yea, or nay nay! No posturising, no pulpit grimace to cram down a weak passage, no twisting of the gown to produce effect, no delicate cough to elicit sympathy, suffices here. It is a solemn, serious, unyielding query—like a note drawn at sight it must be answered in full, or not at all! No previous closet preparation will make the task easy—the acquaintance may be a strange one, and must be judged of unpremeditatedly.

Herein consists the vast difference between the intellectual capital of the medical man and of the gospel minister. For the former it is absolutely requisite that the information necessary to his professional practice shall be carried in his head; for the latter it suffices that his chief material is in his library. Summon the one, some miles' distance to a case of labour, flooding, fever, or dangerous fracture—he cannot run home to ask his books how he is to conduct himself—it is no matter of leisure study—the business is immediate, and demands activity and accuracy. Propound to the other a moral problem, not simple enough for a Sunday-school child, and it may happen that he satisfies you by a stringy discourse on the following Sunday, or calls privately to answer your query after having consulted the fathers as to what he should say. We know that to this rule there are many honourable exceptions—would that there were many more—but the exceptions are not the majority; and no doubt for the simple reason, that the intellectual capital we speak of *is not a necessary commodity* for the clergy to carry about with them. They can afford to dispense with the habitual burden, and most of them do. With the Medical Practitioner, the case is just the reverse, his most available information must be in his head, and it usually is. The inference is plain enough which of the two must be the severer, and the more constant student, which is the more

practical, and, intellectually speaking, the more praiseworthy man.

As regards the crack men of the schools, we have yet to learn that, on the side of divinity, there is, or even has been, any superiority to that of physic. Taking literature and science, against literature and theology, as evidences of talent and acquirement, we dare venture, any day, to produce from the ranks of physic, to any number that may be asked, the parallels or the superiors of anything that can be furnished from the pulpit and ecclesiastical bench. It was our lot, during the days of studentship, to be permitted the opportunity of seeing, and sometimes of associating with, the leaders in the respective ranks we speak of. We marked them well, for we had a motive in it, and for upwards of four years, during which time we measured in our mind's eye many scores of men, we never failed to find the superior in accomplishment in the ranks of physic. Equally gifted intelligences we met with in the other scale; but the men of most information, practical, solid, and sterling, were the students of our own order. And we soon found the reason of it to consist in the fact of the severity, variety, and precision of the studies we are called upon to undergo.

As regards the fathers in divinity, or their compeers in physic, considering as such the greatest lights in the two systems, who have lived from the earliest recorded ages to the present, we should glory in making the comparison, were it not likely to be considered invidious. For preaching the genuine gospel of old, as it came—naked, sublime and simple—from its heavenly originator, tent-makers and poor fishermen were all that were needed. The truth, in itself so eloquent and convincing, needed none of man's garniture to add to its efficacy. It was ready provided—it needed only to be told how easily it might be asked for, and how willingly it would be given! And though, as learning and intelligence advanced, more polished speech and a better turned phrase might here and there be needed, yet it must be allowed, that, substantially, little has been done to render gospel truths more simple or certain than they were of old, by all the learned tomes of disputation, with which men's brains, prodigal in their officiousness, have loaded the library of the divine.

With us, again, it has been just the reverse. Ours has been an untaught, untrodden path. From the moment when Hippocrates first developed a simple truth in our science, to the present time, all has been a work of original labour. Everything has been hidden, and accessible only by tedious, patient, enduring search. Every successive truth that has bestowed glory on its discoverer and benefit on the world, has been sought in the dark, and selected by the nicest skill, from amongst the mass of error and absurdity with which it was encumbered. Only those who have laboured in a mine, like this can tell how hard, how self-sacrificing, is the toil to be endured ere a single truth can be called from darkness into light. No miracles have favoured *us*—nothing has been revealed—everything is discovery—we have established order where only scattered, undisclosed truths existed before—and this by our own individual exertions!

To enter into chronological comparisons would be a task as unnecessary as it would be illiberal—but we have no hesitation in saying, that the *intellectual* labours and services of the clergy in all ages bear not a shadow of a comparison with those of our own fraternity. Here ends this part of our subject.

MISCELLANEOUS CORRESPONDENCE.

GENERAL MEDICAL ANNUITY FUND.

To the Medical Profession generally throughout the United Kingdom.

Gentlemen,—Having recently through the pages of the *Provincial Medical and Surgical Journal*, addressed the members of the Association, on the subject of "The General Medical Annuity Fund," I have considered it my duty to address those of my medical brethren who are not members of that body, because the objects and advantages of this "Fund" are equally interesting to all.

The editor of the "*Medical Times*" has, with much talent and great feeling, on several occasions advocated the claims of this institution, and I trust to his kindness that I may be allowed a small space in his valuable and interesting periodical to again plead a cause which is in very truthfulness near and dear to my heart.

There is in human nature a sad tendency to put off judicious resolutions, and the generous impulse of to-day is often forgotten amidst the whirl and the bustle of to-morrow's occupations. Thus it is that the cause which I am advocating, like the lessons of prudence, morality, and religion, needs to be constantly obtruded, to obtain a due and proper consideration.

The approaching annual meeting of the members of the Provincial Medical and Surgical Association, at Norwich, where the affairs of our Institution will be fully discussed—the amount of subscriptions, the names of subscribers, and the expenses necessary for carrying out the scheme, will be laid before the members,—to such meeting, I am anxious to carry a lengthened list of supporters, to indicate at least that, however the profession may be charged with apathy to its own proper household, there are still amongst us men who have warm hearts, and generous feelings, to meet distress in whatever shape it may present itself.

If I might judge from the vast pile of letters which is at this moment before me—if I might judge from the spirit which pervades them—if I might calculate on corresponding feelings throughout the whole profession—it would indeed be a work of supererogation to write at all. The standard having been once planted, all men would rally round it—and why may I not thus calculate? Is there any obvious difference in the character of our profession, influenced by position or locality? Perhaps there may—but of one fact I am certain, that it is still laborious—that the demand upon our physical and mental energies are alike in all cases—and that in no one spot are we exempt from the common lot of humanity. I may add, too, that in the great majority of instances there is but a poor return for this labour,—a small recompense for the risk and danger of walking amidst pestilence and death; and that as far as public remuneration is concerned, great and important services are rendered with poor and paltry recompense. Let those who legislate for, and direct payment to, medical men, but take their harassing duties upon them for a short period, and my word for it, they will desire it should be shorter and return to their domestic circles, blessing God that their lot is not cast upon such thorny places.

I am not one who would willingly find fault without occasion, nor say of the profession that it is without its measure of enjoyment. He who follows it "*con amore*" finds food in its exercise for high mental satisfaction; his benevolent heart is gratified with every successful case; and his mind is enriched with stores of wisdom which impart to his spirit complacency and delight. But the question assumes another form; while he has life, health, and practice, the measure of his enjoyment is not small; but reverse the picture, and how frightful is the detail. Behold him stretched upon the bed of sickness—the finger of death pressing upon his eyelids—the wife of his bosom, the fond partner of his joys and his cares, hovering around him with pallid cheeks and anxious heart—his little ones—but who can paint such a picture? His eye wanders from object to object, while the conviction of his bereaved family's ultimate destitution sits upon his heart like a fearful incubus. Alas! "the iron enters into his soul." What can this widow and these orphans do? The lady, perchance, has been well educated; she is versed in those accomplishments which make loveliness more lovely. She designs to convert her talents into usefulness, and by labour to earn bread for her children. It is a laudable undertaking, and worthy her spirit. But who shall answer for the success of any speculation? And who shall count the weary days and nights, the many anxious moments she must pass, before a remunerating measure of employment shall be hers. Her feelings have been refined by that very education which she makes the source of her emolument. Her thoughts are dignified, her sensibilities exquisite, the asperities which beset her in life's journey are mountains in her path; well may she sit by the way-side and weep and mourn Oh! let this picture, so correct in its character, so true in all its delineation, and, unhappily, so common amongst us—I say, let this picture come with proper force upon your hearts, and help me in my efforts to avert such calamities.

If only half the medical profession of these kingdoms subscribed an annual guinea towards an annuity fund, see the vast accumulation which the end of five years would produce—see the yearly amount which would flow into the treasury—and see what an available income you would have to remedy these great and crying evil. Yes, the little twig which I have boldly dared to plant would spring up a mighty and majestic tree—spreading out its branches over the length and breadth of the land—giving to the weary and the way-worn a rest and refuge, and a shade and shelter from the sun and the tempest.

The peculiarity of our profession is, that it cannot be delegated to others—it is not *a* medical man, but *the* medical man, who is wanted—whatever may be the talents of your substitute, there is no satisfaction imparted to your patient unless by your own individual visit—thus to recreate is next to impossible—to be sick and confined for months is death to your practice—and if it please God to restore you to health and vigour, after such a visitation, it is only to find your once happy prospects blasted and destroyed. Is not this a position singularly distressing?

Then, again, is the "race," with us, "to the swift, or the battle always to the strong?" I trow not.

Public ignorance is a great calamity to medical men; for talent cannot, as in other callings, find its own level.

The youthful aspirant for medical fame quits his alma mater amidst the warm eulogies of his professors and teachers; they tell him to go forward in his career of usefulness, for his talents and industry will meet their reward, and they load him with honours in verification of their estimate of his abilities. He settles down in some suitable locality, chalks out his future arena, builds castles, and occupies his imagination with fertile images of greatness and renown; he sees in the vista before him the scintillating glories which are to concentrate all their dazzling brightness in one lustrous zone about his head. Alas! the dreams of the visionary come in mournful contrast with the stern realities of every day life. He finds to his cost that, however exalted his position might have been within the walls of his anatomical theatre—however correct his views were of the character and treatment of disease in the wards of his hospital—that the test employed by his enlightened teachers and the public test were as opposite as light and darkness, as wide apart as the frigid and the torrid zone. Every pauper in the parish is privileged to sit in judgment on his conduct, the opinions of every quack are weighed in opposition to his, and he is mortified to find that some popular water-doctor has pronounced a judgment upon a case different from his own, and he has sunk thereby fifty per cent. in public confidence; while some routine man, with as much science in his head as wisdom in an ourang outang, rides rough shod through the country, absorbing the practice of the neighbourhood which the modest merit of our intelligent practitioner sought for in vain. How painful is the position of such men! conscious of their superiority, but unable to convince an ignorant country of their claims, they pass on from youth to age, and at last

are no nearer the goal of their ambition than when they first started.

If I mistake not, Dr. Armstrong suggests as a cure for quackery and as a test of true talent, "that the study of the *principles* of medicine should be made part and parcel of the education of every gentleman." It might be that such education would dispose parties to dabble too much in physic; but of the two evils, I verily believe it would be the least. But I fear I am extending my remarks too far. The objects and intentions of the "General Medical Annuity Fund" have been frequently before you. I have lost no opportunity of calling attention to it, both publicly and privately, and I reiterate again my urgent solicitations that you will sustain it. Its success depends upon you, its final accomplishment is your business not mine. Protect and water this little twig; it shall grow up, and become a great tree; turn from it with apathy and neglect, and it will wither and die; but the wretchedness it was designed to obviate, cling to your body corporate like the foulness of the leprosy, which even the waters of Jordan could not cleanse. Oh! let not these repeated and repeated appeals be lost upon you; be not deaf to the calls of charity, dead to the claims of affection, nor lost to the best spirit by which your souls can be actuated.

By your free and generous combination in this great work, its success is certain—and its success will consummate a noble, a glorious act, worthy your characters as men and as philanthropists, and it will remove, too, a stigma with which every writer on medical ethics is ready to charge you—of unfeeling apathy towards the poor of your own body. "Charity begins at home"—truly, let it begin there—where it may end, depends upon your own spirit and feelings.

I have the honour to be, Gentlemen,
Your faithful and obedient servant,
EDWARD DANIELL.
Newport Pagnell, Bucks,
July 13th, 1846

THE DUST NUISANCE.

(To the Editor of the Medical Times)

SIR,—Allow to me to call the attention of the proper authorities, through the medium of your valuable and widely-extended Journal, to the late hour at which the necessary morning cleanings are performed at the College of Surgeons. Any gentleman entering the hall of that institution before half-past ten in the morning, risks being suffocated by the clouds of dust stirred up, and the library is sometimes to be found in the same state.

Surely, Mr. Editor, the persons to whom the care of the institution is entrusted require to be admonished on this subject.

Your obedient servant,
M.R.C.S.E.
New Broad-street, City, July 4, 1846.

THE ECLAIR.

(To the Editor of the Medical Times.)

SIR,—I was yesterday informed by a medical friend, whom I accidentally met, and from whose able instructions I imbibed the first principles of the science of anatomy, that the crew of the Eclair is considered to have communicated the yellow, or a malignant, fever to the inhabitants of the island of Bona Vista, notwithstanding the quarantine officer has declared that, on the arrival of that vessel in port, the crew were "only affected with a remittent fever."

I am, moreover, told that Government have it in contemplation to send out an agent or commissioners in order to ascertain the amount of damage which the islanders have sustained, with a view of regulating *the amount of compensation which the people of this country are to pay for the injury inflicted by the fevered crew of a British steamer.*

To me, Sir, who have spent the best part of my life in the most sickly cities of the West Indies (Port au Prince, the Havana, and St. Jago de Cuba), and who have been most indefatigable in observing not only the causes which *generate* fever, but also the *circumstances which* tend to *sustain and propagate it when generated*, such an intention on the part of England (however it may enhance, in the vulgar estimation, their reputation for justice) savours more of folly than of wisdom.

Permit me to observe that it is *absolutely impossible* from the nature of things, that the crew of any vessel, or the crews of any number of vessels, should *infect the population of a whole city*, much less of a *whole island, with a malignant or contagious disease, while the causes which usually give rise to such diseases are not, and have not been, in operation in the place itself.*

In the case of the Eclair, however, it may, with much more reason, be said that the crew contracted or caught the *malignant disease* in the island, than that they communicated it to the inhabitants; for the health-officer, who visited her shortly after her arrival in port, declared *that the crew were only suffering from a remittent fever, which he evidently did not consider to be of a malignant character*, otherwise they would not have been suffered to land.

Now, the explanation of the circumstance of the outbreak of the malignant fever among the islanders shortly after the arrival of the Eclair at the island, and appearing first among the crew, is as follows:—The causes which usually generate malignant fever (viz., an impure state of the atmosphere, and an attendant depravity of the vegetable sustenance of man and the lower animals) had been in operation some time before the arrival of the Eclair, inducing a predisposition in the bodies of the inhabitants to take on the malignant febrile action, on the application of the usual *exciting* or *occasional causes* of fever generally, viz., sudden transitions of atmospheric temperature, depressing passions of the mind, fatigue, general intemperance, &c.

The crew also, I admit to have been predisposed to be affected with the malignant disease, in the same degree that any simple fever is disposed to become malignant when the patient is exposed to the influence of the causes *which generate malignant diseases*. But the inhabitants were *predisposed in a much greater degree*; for, in them, the ordinary *exciting causes of fever, operating anywhere, would have developed malignant disease*. And the only reason why *the malignant fever appeared among the crew first*, is that they *were already affected* with a *simple disease*, which was *aggravated* by the operation of the *causes inducing malignant disease*, which had already been in operation in the island, but had not arrived at that point of concentration, which was sufficient to *excite fever* in the previously healthy, but *now malignantly predisposed inhabitants*. As soon, however, as the *occasional or exciting causes of fever generally, came into operation, on bodies predisposed to assume the malignant febrile action*, the fever, ignorantly attributed to the crew of the Eclair, declared itself among the inhabitants.

Now, although I confess I do not know anything about the particular circumstances of the crew of the Eclair and the islanders, for I have not read the articles that have appeared in the various periodicals on this subject, but only heard the circumstances of the case incidentally alluded to in ordinary conversation; yet, from my general knowledge of such matters, I will venture to assert that they are as follows:—The crew were a set of men whose constitutions, from previous service on board a steamer in a warm climate, had been debilitated (but not depraved), and consequently indisposed to support a continued increased action of the arterial system, whence, under the ordinary operation of sudden changes of the weather, *a fever of the simple remittent type was developed*. On the other hand, *the inhabitants, from previous exposure to the operation of the causes inducing a depraved state of the system, in other words, a corrupt state of the blood* (as, for instance, a continued great elevation of atmospheric temperature, absence of moisture in the air, and a withered state of vegetation, producing a scarcity of green vegetables for ordinary consumption, or the very reverse of these states, whether of the weather or of vegetation), were predisposed to become affected with a malignant fever, on the occurrence of a sudden change of weather, whether from dry to wet, wet to dry, hot to cold, or cold to hot.

If this be the cause, it will, therefore, be evident that the crew are more indebted for the malignant fever to the inhabitants, than the inhabitants to the crew.

In elucidation of these statements I shall advance, what all medical men know, who have practised in the West Indies and other warm climates, viz., that Europeans, on arriving in tropical climates, being, from the plethoric state of their systems, and the operation of the ordinary heat of the weather, predisposed to febrile action) are usually attacked with fever, *if exposed to its ordinary exciting causes*. This *fever*, however, *under ordinary circumstances*, is generally of the simple *inflammatory or continued type*, marked, perhaps, with determination of blood to a particular organ, as the head or the stomach, which is readily subdued by the employment of blood-letting and other antiphlogistic means. The case, however, is quite different if the *inhabitants of the place should happen to be suffering from any epidemic disease*. For in this case *the fever, which attacks Europeans newly arrived, partakes of the character of the malignant disease*, and is known by the names of the epidemic yellow fever, plague, &c

I could say much more on this interesting subject were I so disposed, or had I leisure to do so; but those who are inclined to receive further information will have an opportunity of doing so, by reading a work, which will be published in two or three weeks, on "Fever, Physiologically Considered," to which it is my intention to add "Considerations on Yellow Fever, Typhus Fever, Plague, Cholera, and Sea Scurvy," out of which naturally flows "the consideration of the subjects of contagion, and the propriety or impropriety of the existence of quarantine laws."

I should add that the continuance of the disease on board the vessel after arrival in this country is easily explained; for when a number of persons are kept shut up for any length of time in a confined place, the natural effect of such an event is to corrupt the air and depress the passions—both which are predisposing or generating causes of fever. If, therefore, we consider that the crew were already diseased, and more probably, from the number of deaths that had already occurred, *scoured*, we can be at no loss to account for the mortality that took place on board that *devoted vessel*. Let us hope, however, that it is the last time such an event will tarnish the lustre of British humanity.

I am, Sir,
Your most obedient servant,
DAVID M'CONNELL REED.
Formerly Physician to the Seamens' Hospital at Port au Prince.
11 Queen's-road, Notting-hill.
July 14, 1846.

CHOLERA AT NOTTING HILL.

(To the Editor of the "Medical Times.")

SIR,—I send you a case of cholera to insert, if you please, in your useful journal. On Monday, the 29th of June, the mother brought her child, of five months old, to me, and stated that the child vomited after taking the breast. There did not seem to be anything much amiss from outward appearance. The child was not so warm as it ought to be; pulse 110, neither strong nor weak; tongue rather white in the centre. Bowels not purged; stools light. The child commenced vomiting on the Friday previously, which continued each time the patient sucked. The stools had been light-coloured for some time, and were becoming lighter. I ordered an ipecacuanha emetic, and the hydrargyrum c. creta c. rheo in alterative doses after, to be taken three times in the day. The next day I was sent for to see the child, and found it vomiting and purging every ten minutes the usual white-coloured substance, but not in any very considerable quantity. The pulse and tongue were the same as on the preceding day; there was a dark circle round the eyes; skin pale; and face not thin, though the skin and flesh of hands were very flaccid. The veins were very distinct as small black lines beneath the integument. There were no cramps, but the effort of vomiting produced pain; the child moaned much, and the face became dark and suffused during the act. I ordered a warm bath with salt in it, then a mustard poultice to the pit of the stomach, and a

grain of calomel every hour, to be placed on the tongue and washed down with effervescing salines, which were to be taken very frequently. The next day I saw the child; the vomiting and purging had ceased, and the stools had become green. The infant was very low, and from being restless and wakeful before, now went to sleep. I told the mother to give broth with salt in it. No more medicine has been given, and the child is well and hearty.

Remarks.—When the cholera visited England last, a few cases I had, I treated with calomel (ten grains), soon after a little rhubarb, and gruel with brandy as often as it could be taken. (I allowed some port wine to be given to the child, which I have no doubt helped to bring about speedy recovery). This treatment appeared to have the most happy and speedy effect, for they were fully relieved in a few hours, and quite recovered in a few days.

Some of these cases had blueness and cramps for their most prominent symptoms, which were quickly made to succumb to the remedial power. The mercury, it appears to me, dislodges the viscid bile from the gall bladder, which purifies the putrid state of the excrements irritating the secreting vessels and lacteals; the food likewise taken into the stomach will tend to emulge the biliary tubes by its proper excitement. I do not see how salt can have any good effect during an acute attack, as there would be not time enough to enter and change the vitiated bile (more properly speaking, its constituents) in the blood. But I believe that salt, when taken before an attack, will prevent it by directly checking farther putrescency taking place in the intestines, and stimulating the sluggish bowels to throw off the offending matter, and indirectly by entering the blood through the lacteals to participate in the production of bile, which is also necessary as an antiputrescent and stimulant. No doubt the alkalies are useful on the principle of Mr. Stevens.

Salt in a bath may be perhaps useful by being absorbed, as well as by stimulating the skin. I may also add that I find a great many persons in this neighbourhood having light coloured and pale stools, with diarrhœa or costiveness, which have been much benefited by the use of salt, early in the morning as well as at meals. Bilious cholera is also prevalent in the same families.

I am, Sir, your humble servant,

Francis Parker Hoblyn.

4, Clifton-terrace, Notting-hill, July, 1846.

COMMITTAL OF A DRUGGIST ON A CHARGE OF MANSLAUGHTER.

A druggist named Rowe, who has been practising near Plymouth as a medical man, has recently been committed for trial on a charge of manslaughter, under the following circumstances. It appears that the person Rowe had been in attendance on a woman named Monro, aged sixty-eight, from the 19th to the 28th of June, during which period he treated her for disorder of the liver, and on more than one occasion said there was no danger. On the 24th of June she complained of violent pain in the abdomen, with obstinate constipation and vomiting. The matters vomited soon became stercoracious, and of a most fetid smell. Rowe made no examination of her person, but ordered castor-oil. The patient continued in this state under the man Rowe till the 28th of June. Constant vomiting, with hiccup and pain, and, in fact, all the symptoms of strangulation of the intestine, being present. On the evening of the 28th Dr. Budd was sent for, and of course immediately recognised the state the patient was in. He sent for Mr. May, a surgeon, who also directly discovered the cause of the patient's disease. Mr. Swain, another surgeon, was called into consultation, and these gentlemen, on examining the tumour, found that from the length of time it had been strangulated, the only chance for the patient's life lay in the immediate performance of an operation. The integuments covering the hernia (a femoral one on the right side) were tense, shining, boggy, and very painful, showing far advanced inflammation; and the patient was in an advanced stage of depression. After the division of its covering, the sac gave way under the finger, with the escape of very fetid matter, and the intestine was, as might have been expected after at least four days' strangulation, entirely gangrenous. The wound was of course left open, but the patient, though relieved considerably by the operation, was too weak to rally, and gradually sank and died on the 30th of June. An attorney was heard for the defendant Rowe; but the magistrates considered, after the very clear medical evidence given by Dr. Budd and Messrs. Swain and May, they would be justified in sending the case to a higher tribunal. Rowe was accordingly fully committed to take his trial for manslaughter, at the approaching assizes to be held at Exeter.

A somewhat curious feature in this case is, that a coroner's inquiry had been previously held on the deceased Mrs. Monro, and a verdict had been returned of—"Died from strangulated hernia produced by natural causes," without any animadversion on the conduct of the person Rowe. We shall probably revert to this case after the trial of the accused, which will take place very shortly.

Galvanism in Midwifery.—Mr. Dorrington relates, in one of the numbers of the Medical Gazette, three cases in which galvanism was applied, to hasten or induce contraction of the uterus. The first case was one of placental presentation, in which the patient, aged thirty-one, at the eighth month of her fifth pregnancy, was seized with slight flooding, which soon ceased, however, and did not return for a fortnight, when a sanguineous discharge again appeared, attended with pain above the pubes. By rest this went off, but recurred again on the next day very slightly. On visiting her, on this day, Mr. Dorrington found some coagula in the upper part of the vagina, upon removing which, the os uteri was discovered oval in shape, dilated to the size of a penny-piece, tolerably dilatable, and almost entirely filled up by the placenta. The membranes were unruptured, and the head presented. There were occasional slight pains, and the fœtal heart was audible. The galvanic conductors were applied in the usual way, and strong uterine contraction set in. Mr. Dorrington then ruptured the membranes. The use of the galvanism was continued for an hour and a-half, by which time the pains had begun to come on spontaneously, at intervals. The hemorrhage was very slight. After some hours, as the labour did not advance, the galvanism was reapplied, pretty strongly. The placenta descended as the labour progressed, and its most depending portion was protruded from the os externum before the head, so that the child passed over the half-detached placenta along the vagina. The child was dead, although its heart had been audible within half an hour of its birth. The labour was completely over in about five hours after the first application of the galvanism. The second case was one of twins. The first child, the head presenting, was born in about four hours and a-half from the commencement of labour. For an hour after its birth there were no pains, but at the end of that time they came on very feebly. Galvanism was applied, the effect of which was immediate; strong labour-pains coming on, and continuing whilst the galvanic circle was complete. In about three quarters of an hour a puny female child was born alive. In the third case, in consequence of a contraction of the pelvis, which had in a previous labour required the use of the crotchet and perforator, Mr. Dorrington determined on inducing premature labour at the eighth month. Accordingly, on the 1st of April, 1845, he applied the galvanism for about twenty minutes, with occasional intermissions. The uterus hardened under the application, and the patient felt labour-pain, but this lasted only whilst the galvanic currents and shocks were given. In about eight hours and a half after the use of this agent, the membranes ruptured, little or no dilatation of the os uteri having occurred. On April 3d, about forty-eight hours after the application of the galvanism, Mr. Dorrington made a vaginal examination, but there was no dilatation of the os uteri. On making an abdominal exploration, he discovered the head of the child at the fundus uteri. In about three hours after labour came on, and the child presented with the breech. The case went on well so far as regards the action of the uterus, but the child was born dead after a labour of about nine hours' duration. The placenta came away in an hour after the birth of the child. The nates and scrotum of the child were much ecchymosed, and its face purple from congestion. The woman suffered from a severe attack of menorrhagia about twelve days after the birth of the child, which yielded to ordinary treatment and the use of the plug.

GOSSIP OF THE WEEK.

Royal College of Surgeons.—The following gentlemen were admitted members of this college on Friday, the 10th inst., viz., Messrs. D. Chalmers, J. G. Oakshott, W. Haines, H. J. L. Rooke, G. E. Freeman, A. C. Croft, R. Vardy, G. Henty, and H. R. Collins.

Apothecaries' Hall.—The following gentlemen were admitted licentiates on the 9th of July, 1846:—John Charles Lory Marsh, John Bassett, Charles Walker, Edward Warburton, John Dowker, Joseph Boland.

Obituary.—July 6, at Gloucester, Mr. Roberts, surgeon, aged eighty-seven, for nearly fifty years in practice at Malmesbury, Wilts.

Appointments.—Surgeons: J. Sloan, M.D., to the Tortoise store and guard ship, at Ascension; W. D. Kerr, M.D., to the Hound. Assistant Surgeons, W. B Fegen to the Vernon: A. Batwell, M.D., to the Penguin; T. Tait, to the Trident.

War Office, July 10th.—79th Foot: Assistant-surgeon John Grant, from the Staff, to be surgeon, vice M'Munn, appointed to the 40th Foot. Hospital Staff: Assistant-surgeon Charles Alexander Gordon, M.D., from the 3rd Foot, to be staff-surgeon of the Second Class; William Singleton, M.D., to be assistant-surgeon to the Forces, vice John Grant, promoted in the 40th Foot; Anthony John Dolce, M.D., to be assistant-surgeon to the Forces.

Ordnance Medical Department.—Temporary Assistant-surgeon Stanhope Hunter Fasson, to be assistant-surgeon, vice Farr, promoted; Robert Thornton, gentleman, to be assistant-surgeon, vice Staunton, promoted.

The dentist question has just been definitely settled in France. The Court of Amiens, after long deliberation, has decided that the dentist shall in no case be considered as approximating to the physician or surgeon.

Spread of the Gratis System.—We understand that dispensaries are about to be established in France for giving gratuitous medicine and attendance to the cattle of poor people!

Prize Essays.—The Louisiana Medico-Chirurgical Society offers a gold medal of the value of one hundred dollars for the best Essay on Strictures of the Urethra, with their treatment. This prize is offered to the competition of the profession in all countries; but the essays must be written in the English or French language. The communications must be accompanied with a letter and corresponding mottoes, to the President of the Louisiana Medico-Chirurgical Society, New Orleans, La., and should be received by the 1st February, 1847.

The yearly meeting of the Italian Scientific Congress will take place at Gênes on the 14th of September next. The town of Gênes has recently placed the sum of 6,000 francs at the disposal of the congress, to defray the expenses of the experiments in medical and physical science which will be made during this meeting.

The establishment of a new society, to be called the Ophthalmological Society, is talked of in Paris. The object of the society will be the discussion of various matters calculated to advance the science of ophthalmology.

The numbers of medical students at the universities of Gand and Liege during the year 1845, were respectively 71 and 78.

New Infirmary.—The demolition of a row of houses on the north side of Short's-gardens, Drury-lane, commenced on Friday last, for the purpose of procuring an eligible site for the erection of a new infirmary in St. Giles-in-the-Fields.

St. Thomas' Hospital.—The annual inspection of this institution by the governors of the corporation took place last week, and was numerously attended. The result of the inspection was gratifying to all present.

Royal Sea-Bathing Infirmary.—A quarterly meeting of the governors of this institution was held last week, when a warm discussion arose respecting the resignation of Mr. Field, the lately appointed house-surgeon, who had resigned in consequence of the appointment of three honorary surgeons to superintend the arrangements—an appointment which Mr Field considered unnecessary, and prejudicial to the authority which it was his right to exercise in the establishment. After a stormy discussion, it was resolved—"That the subject of the appointment of the honorary surgeons be referred to the court of directors for reconsideration, and in the meantime all further proceedings on these matters be suspended."

The cholera, which made its appearance at Aden early in May, has, in consequence of the changing of the monsoon, nearly vanished, isolated cases occurring only at intervals During the five days it raged, upwards of 400 persons were carried off, the deaths being four out of five attacked; the cholera is, however, rapidly advancing along the territory of Yemen, and fears may be entertained of its appearance on the shores of the Mediterranean. The disease is making dreadful havoc in India.

King's College Hospital.—Alderman Copeland, M.P., the treasurer of this institution, has just received the munificent donation of £321 0s. 10d. from an anonymous contributor in aid of the funds of the hospital.

Ibrahim Pacha's Teeth.—The visit of his Highness Ibrahim Pacha to this country has given rise to a refinement in false teeth, for which a patent is, we believe, already secured Having complained to Mr. C. Waite, the professional gentleman selected *to alter all the sets* (already made public) supplied in Paris, it was proposed to stud them with points of gold where the mastication was required, and in several trials with crusts of bread it was determined to leave the points of gold in the upper set projecting from the surface, and those below quite flush with the bone. This was the arrangement added to the sets he brought to this country, which the Pacha publicly told all his attendants enabled him to masticate as well as he had ever done in his life. In finishing up a magnificent set in gold, and wishing to provide for mastication, the blocks were studded with precious stones, for which the patent has been secured. The Pacha boasted of making no secret of his false teeth, but complained most bitterly of an *enormous sum* charged him on the continent for imperfectly supplying them

Poisoning in France.—A trial was commenced at Strasburgh on the 26th ult., which has excited great interest, not only in that town, but throughout France. The charge is one of murder by poison, on which the declarations of the Strasburgh professors do not coincide with those of the Parisian chemists. Last November an advertisement was published in the newspapers, inviting those who could give information of a certain flour-dealer, who, during an attack of fever, had risen from his sick bed and taken to flight, to do so at a given address. The disappearance of the man remained a complete mystery, until, a few days after, his body was found concealed in a water-closet. The body was cut up in pieces, and the heart and entrails, which were also afterwards discovered, removed They injury immediately led to the suspicion that the wife of the unfortunate man had committed a murder upon her husband, and taken out the heart and bowels, in order to avoid an accusation of poison, in case of an eventual discovery and examination of the remains. She was immediately arrested, and the entrails and heart of the murdered man were given up to the professors of the university, for the purpose of ascertaining by analysis whether they contained poison. A well-grounded supposition that this must be the case was the more general, inasmuch as arsenic was found in the house of the accused, and it was also proved by an apothecary that the prisoner had bought such poison in the preceding August, from which period the diseased had commenced to sicken. The chemical professors of Strasburgh declared that they had found no traces of arsenic in the remains delivered to them. The authorities engaged in the investigation were, however, not satisfied with this statement, but sent the corpse to Paris for analysis, when professors Duvergie, Chevalier, and Flandin discovered in it a strong dose of arsenic. These professors are now at Strasburgh, and at the trial repeated their statement. By desire of the court and Jury the trial was adourned for the purpose of making a renewed analysis, of which the result has not yet been made public. The accused, who wishes to make it believed that her husband poisoned himself, has a very bad reputation; and, in the course of the trial, another crime has come to light Five years ago a step child of the accused fell from a garret window, and was picked up lifeless. All the facts conspire to prove that in this case, also, a wilful murder was committed by the accused in order to insure a larger inheritance to her own children.

The question of the influence on health of the emanations from rice grounds has occupied the attention of the scientific world, as also of the Government of Italy during some time. A prize of 500 francs has been proposed by Dr. Bonnafons for the best essay on the subject—the paper to be read before the Royal Agricultural Academy of Turin.

M. Rostan has recently proposed strong pressure on the epigastrium in cases of severe hiccup. M. Rostan has used this plan with great success in several cases.

In a work on the diseases of the eye, recently published by the director of the ophthalmic department of the Belgian armies, the following extraordinary assertion is made. The author states that in every infection of the eye by the application of urethral discharge, either in the adult or in the infant, an enlargement of a gland situated in front of the ear, which the author calls a preauricular bubo, takes place. This gland varies in size, when enlarged, from that of a pea to that of a nut. The author asserts that this mark distinguishes gonorrhœal from simple purulent ophthalmia.

M. Henri, in making a report to the French Academy of Medicine on the mineral waters, took an opportunity of remarking on the appointment of medical men who understand nothing of chemistry to the superintendence of such establishments.

In a report of the diseases treated in one of the Parisian hospitals during the year 1811, the following passage occurs in reference to typhus fever:—"We think," says the author, "that typhus fever consists in an alteration of the blood; it is, therefore, necessary to clear out the primæ viæ, and then to attack the alteration by tonics and antiphlogistics. This is why lemonade is prescribed, and perhaps also it may assist in resuscitating the blood."

The Immortal Jenner.—We have been favoured through the kindness of Mr. T. M. Stone, the librarian of the Royal College of Surgeons, with a view of a manuscript letter by the illustrious discoverer of vaccination. The letter is supposed to have been written to the son of the late Henry Cline, Esq., when recovering from fever, and shows how acute an observer of nature Jenner was. In the course of the epistle he speaks of the use of the microscope, and the wonderful discoveries to which it gives rise, and mentions some researches he was then making into the causes and effects of the morbid changes in the liver of brutes. The letter bears the date of March 15th, 1813.

A remarkable circumstance as showing the real state of medicine in Paris at the present time is the absence of all scientific systems of medication both in the hospitals and elsewhere. All the *Thérapeutique* of Physicians, in fact, is reduced to five or six remedies, and several of these, again, are purely mechanical in their action. Some practitioners even only know three remedies bleeding, diet, and water. Thus the standing materia medica is entirely neglected, and we must not be surprised at the profound ignorance which generally obtains respecting the action of medicaments. All that is known on this head may be reduced to a few erroneous notions based on some paltry formularies. Medicaments are professed *a priori* to be irritating, exciting, or stimulant, and, consequently, most frequently injurious; and when by chance a medicine has succeeded in any one's hands, it is immediately thrown into the category of specifics. There are no therapeutic principles, and a blind empiricism or an absurd iatro-chemical system obtains. In place of studying remedies, physicians devote themselves to establishing humoralism. The medical humoralism of the present day forms a kind of sea of troubled waters, the adventurer on which finds himself instantly in the domains of M. Andral and M. Bouillaud. Broussais was reproached with being a sysgotemist, and his reproachers have fallen into a system still more deplorable both for science and for art.

Provincial Medical and Surgical Association.—The annual meeting of the southern district branch of the Provincial Medical and Surgical Association was held at Dorchester on Saturday last, under the presidency of George Curme, Esq., a practitioner in Dorchester, and mayor of that town. The meeting was fully attended, and the president delivered an able address, in which he touched on the objects of the Association, and the manner in which they had been carried out. He alluded to several interesting monographs which had emanated from their members, and particularly instanced the researches of Dr. Addison on the blood corpuscles, and those of Mr. Ceely on variola vaccina. He next alluded to the biography of several distinguished men, and showed the value of moral reputation. The orator then alluded to the spirit of animosity to the mass of practitioners which pervaded the Council of the College of Surgeons, and to Sir James Graham's abortive attempts to reform the profession. He dwelt on the necessity for unanimity and mutual trust among the profession, and expressed his conviction that without keeping up their honour individually as well as in a body, they would receive little benefit from any measure of reform. Several pathological specimens were presented to the Society by different gentlemen who attended, and after considerable discussion on subjects connected with the profession, a resolution was passed expressive of disapprobation of the conduct of the College of Surgeons' Council, both as regards their opposition to the progress of reform, and their obtaining the supplemental charter without the concurrence of their members. The thanks of the meeting were then voted to the chairman and secretaries, and the members dispersed. The next meeting of this branch of the Association will be held at Winchester.

MORTALITY TABLE,

For the week ending July 11, 1846

Causes of Death	Total.	Average 5 summers	
All Causes . . .	901	898	968
Zymotic, or Epidemic, Endemic, and Contagious Diseases	217	201	188
Sporadic Diseases—Dropsy, Cancer, and other Diseases of uncertain or variable Seat . . .	108	99	104
Diseases of the Brain, Spinal Marrow, Nerves, & Senses	152	155	157
Diseases of the Lungs, and of the other Organs of Respiration	203	227	294
Diseases of the Heart and Blood-vessels . . .	28	23	27
Diseases of the Stomach, Liver, and other Organs of Digestion . . .	111	87	72
Diseases of the Kidneys, &c.	11	6	7
Childbirth, Diseases of the Uterus, &c.	8	9	10
Rheumatism, Diseases of the Bones, Joints, &c. . .	13	6	7
Diseases of the Skin, Cellular Tissues, &c.	1	1	2
Old Age	29	52	67
Violence, Privation, Cold and Intemperance . .	16	26	26

No. 356. **SUMMARY.** July 25.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of July 13, 1846; M. Mathieu in the Chair.

Congenital Encephalocele.—Dr. Belhomme communicated through Professor Serres the following interesting case:—

On the 26th of May, 1846, a woman was delivered at eight months of a living child, presenting a singular variety of congenital malformation of the head. The parietal and frontal bones were entirely absent, and a portion only of the occipital was visible. In their place arose a large tumour adhesive to the amnion, and containing a portion of the brain; a smaller swelling placed to the left of the former, also seemed to enclose some part of the encephalon; both were moveable and compressible. The orbits had not formed, and the left eye alone had been developed; the nose was divided, and also the upper lip, and the palate was replaced by a membranous diaphragm. The other viscera were healthy. On the second day after birth the cerebral organs inflamed, and on the sixth the child died. Dissection shewed the absence of convolutions and the atrophy of the anterior cerebral artery, which was impervious to injection. The cerebellum, pons varolii, and bulb, were natural. This case must be referred to the peculiar sort of deformity described by Geoffroy Saint Hilaire, in which morbid adhesions taking place between the membranes of the ovum and some viscus, at an early period of utero-gestation, the parietes of the natural cavity to which the organ belongs, are arrested in their development, and cannot therefore close over the protruded parts.

Influence of Cold on the Human Body, by Dr. R. Latour.

M. Latour is of opinion that the increase of heat supposed to arise from reaction after the application of cold is only apparent. In order to prove the assertion, the author having measured with a thermometer the temperature of his foot, ascertained that the mercury rose to 26 deg. (Fahr. 78 deg.); after 15 minutes immersion in cold water the foot had lost 13 deg. (Fahr. 24 deg). The foot was withdrawn, and ten minutes afterwards was the seat of a burning sensation of heat; on examination, the thermometer marked only 23 deg. (Fahr. 73 deg.) M. Latour insists upon a fact, which he appears to think new,—viz., that the human body is not susceptible of acquiring more than 2 deg. additional heat.

Composition of the Atmosphere of Crowded Rooms.—It is generally admitted that in crowded rooms a large quantity of carbonic acid is evolved, which accumulates more in the lower than in the superior part of the room. M. Lassaigne has submitted this popular belief to the test of chemical research, and finds that the carbonic acid is distributed with a remarkable degree of equality; but if it is more abundant in one region than in another, it is chiefly in the superior layers of the atmosphere.

Ergotine in Hemorrhage.—M. Bonjean, of Chambéry, again brought before the Academy an account of the anti-hemorrhagic virtues of this substance, and we were pleased to hear Prof. Velpeau reduce to their real value the exaggerated praises which the author lavished upon Ergotine—praises already sounded in favour of a thousand other substances which have since proved quite inefficient to arrest hemorrhage. Not only is undeserved panegyric to be severely reprobated in a scientific point of view, but in the present matter it is positively dangerous,—as it may, by misleading the confidence of surgeons, induce them to lose in vain attempts, time which may be much better occupied in effective measures.

ACADEMY OF MEDICINE.

Meeting of July 14th, 1846; Mr. Roche in the Chair.

The Plague.—M. Pariset observed that with pure air and water, with healthy food in moderate proportions, none of those singular mutations productive of death in man or animals could exist. The excess of food or of abstinence, of labour or of repose, and sudden changes of temperature might cause disease but never the plague. To occasion the plague, the air, water, or food, must introduce into the human system foreign elements of disease, and these were the emanations,—the miasmata disengaged by the putrid bodies of animals and man. This was not only the opinion of the orator, but of the most respected authorities—of A. Paré, Diemerbroek, Pringle, Huxham, Haller of the best observers, of the most learned physicians,—and if in Europe these causes were neutralised by others, such as the sudden changes of weather, general habits of cleanliness, good food, and particularly the quality of the soil of our burial-grounds, yet they still cause the preliminaries, and almost the equivalents of the plague, in the shape of suffocations, syncopes, sudden deaths, ophthalmia, cephalalgia, diarrhœa, dysentery, and those malignant fevers so closely allied to pestilence, and those universal exanthemata seen by Diemerbroek, and observed by M. Pariset in Syria.

The composition of the soil of burial-grounds was in M. Pariset's opinion an important and interesting chemical question. Vicq d'Azyr saw at Toulouse two churches in which the dead bodies were naturally preserved; M. Danger had informed M. Pariset that in limy or argilaceous soils the decomposition of the bodies was followed with no emanation. M. Pariset further stated that in this respect corpses differed much from each other, and recalled the statement of Ammidianus Marcellinus on the different decomposition of the bodies of the Romans and Persians after the battle of Aminium.

It is, in M. Pariset's opinion, a probability nearly akin to a demonstrated fact, that the putrefaction of animal matter, and particularly of human remains, is the cause of the plague. It would remain, therefore, only to discover if in the world one spot exists in which that morbid cause acted with sufficient intensity to produce the disease in a permanent manner. Syria had been talked of, and yet it was one of the healthiest lands in the universe. Scanderoun is, it is true, surrounded with marshes, but that city never had the plague before the year 1781, when the disorder was brought there from Constantinople or Egypt. The plague never begins in the interior of Lebanon, that long chain of mountains, the feet of which bathe in the sea. It is always in some maritime city, near the Mediterranean, that the pestilence originates—Byass, Tripoli, Beyrout, Seyde, Tyre, or St. Jean d'Acre. These towns always take the plague from Syria, and Syria from Egypt, and more rarely from Constantinople. This is true also for the Ionian Islands, Asia Minor, Adana—it is true even for Constantinople; there the few precautionary measures which have been taken have sufficed to arrest the inroads of the epidemic.

In M. Pariset's opinion, and as the result of his long observation in the Levant, he would say that only one country in the world existed in which the plague was permanent; that country was Egypt. But how is it then that this country, formerly so healthy, had now become a sojourn of ruin and death?—it was entirely due to the emanation from the human and animal corpses.

Ambrose Paré tells us that in 1562, the caves of the Castle of Pènes, filled with corpses to a depth of 300 feet, caused, by their fœtid emanation, several cases of plague in the province of Agénois. The same thing is to this day going on in Egypt, where formerly all putrescible matter was preserved in bitumen, in linen, jars, and stone coffins, and buried in caverns, more durable than temples or monuments. Now-a-days, on the contrary, the bodies are buried without preparation, and the heat of the sun makes Egypt an immense distillery of corpses. It is only by endeavouring to remedy this order of things, by removing cemeteries to the desert, and cutting canals for the alcaline waters of the Nile, that the country can ever be made healthy.

M. Londe then read a letter which he had recently received from Clot-Bey, of which the following is an abstract:—

"1st. It was as impossible to point out the date of the first plague, as that of the first appearance of yellow fever, cholera, or any other epidemic disorder. 2d. The commission considered the plague as analogous with typhus, forgetting that typhus never assumes a general epidemic character, that it is a disease of all countries, that its causes are always appreciable; that typhus could be at will produced artificially; whereas the plague requires special conditions of climate and season, that no artificial means whatever can produce it. 3d. Not a single case of contagion of the plague in European Lazarets has yet been brought forward, and it is proved that the unloading of the bales of cotton

from Egypt has not yet, in one solitary instance, communicated the plague. 4th. It is as impossible, by hygienic regulations, to destroy the plague in the Levant, as it is to destroy yellow fever and cholera, because neither the climate nor the physical constitution of the Eastern countries can be modified. It is a mistake to attribute the immunity enjoyed by Turkey and Egypt, during three years, to the few sanitary laws lately enacted; before these laws were enforced, periods of ten years had elapsed without the plague making its appearance."

The meeting was adjourned at 5 o'clock.

LA SALPETRIERE.

Clinical Lecture continued.—*General Paralysis of the Insane.*

By Dr. Baillarger.

Lesions of the Intellect.—In some patients these lesions consist chiefly in a weakness of the understanding unaccompanied with delirium. They remain quiet, and die without having experienced any agitation. The greater number of such patients are never taken into account in statistical tables, because they remain in their families, and enter neither public nor private asylums. It is particularly in young and plethoric subjects that general paralysis is attended with delirium; monomania, especially ambitious monomania, is observed in these instances; but, on account of the loss of the faculties of memory, the patients commit in their statements gross errors and frequent contradictions,—a circumstance never observed in cases of monomania without paralysis. Hallucinations are sometimes met with, particularly hallucinations bearing upon general sensation. Dypemania, with a tendency to suicide, though uncommon, is accidentally seen in the paralysed insane; gradually the affective faculties diminish and disappear, and the demented patient looks with indifference upon those whom he was most tenderly attached to.

Lesions of Nutrition.—During the first period the appetite is often abnormally increased, and later, the defecations become involuntary; but before the definitive loss of power over the sphincters, many women are affected with this disgusting symptom only during the catamenial period. The body gradually becomes thinner, and gangrenous spots form not only on the parts on which any pressure exists, but also on others, and the tendency to gangrene is not limited to the skin, but is often observed on the mucous membranes.

In the progress of the disease, the symptoms we have described succeed each other in the following order:—Slight embarrassment of speech; tendency to drowsiness; weakness of memory; the patients then begin to lose their professional capacity, and the loss of genital power often precedes the other symptoms one twelvemonth. Slight trembling of the limbs and central congestions appear after the close of the first period. In M. Baillarger's opinion paralysis of motion almost always precedes delirium, although the converse was considered by Calmeil to be the fact.

The progress of the disease is very irregular; some remain a long time in the first stage; others, on the contrary, offer from the very beginning the signs of the second. The mean duration of general paralysis may be said to be from eighteen months to two years; women usually live longer than men, a fact accounted for by the greater frequency in men of epileptic attacks, the most common of all complications. Death is habitually brought on in the first stage by cerebral congestion, in the second by epilepsy, and in the third by marasmus or asphyxia, from paralysis of the pharynx; pneumonia, œdema of the lungs, and chronic enteritis, incidentally carry off some patients.

Anatomical Changes.—The most frequent of all is the adhesion of the central membranes to the softened surface of the brain. This change Calmeil found in 28 out of 35 cases. In a second group of alterations, are met serous secretions in the ventricles and arachnoid, together with atrophy of the cerebral substance. In some cases the pressure supported by the brain has caused it to assume a degree of hardness which has erroneously been looked upon as characteristic of general paralysis. Various other alterations have also been described, such as false membranes, cysts, hemorrhage, and absorption of cerebral matter.

According to Bayle, the disease is due merely to *Chronic Meningitis.* In M. Parchappe's opinion it is constantly referrible to softening of the cortical substance, and M. Foville attributes it to morbid adhesions formed between the various layers he describes in the white substances. M. Baillarger believes that general paralysis results from an alteration hitherto undetected, but constantly the same in all patients.

The only period of the malady during which treatment can interfere with any chances of success is evidently the first. Venesection and local depletion, together with purgatives, should be resorted to, and a warm climate should be advised. The diet should be nutritious. During the second stage benefit will be derived from the occasional application of a few leeches to the anus, and of a seton to the nape; to the last stage hygienic measures only are applicable; it is particularly necessary to be aware of the possibility of asphyxia from paralysis of the pharyngeal muscles.

The Spas of the Rhine, by Prof. Trousseau and Dr. Lassaigne.

Hemorrhoids.—We will dedicate a special chapter to the consideration of those piles which are critical of hypochondriacal diseases. We will in another place speak of that form of hemorrhoidal congestion observed in gout: for the present we will only treat of idiopathic hemorrhoids, by which name we designate anal congestion unattended with any general disturbance; to these a sanguineous rather than plethoric temperament is a predisposition; they are not preceded by any prodromic symptoms, nor do they present even in a slight degree the usual signs of abdominal venous congestion, and the sanguineous evacuation becomes established, without requiring medical aid. But the diminution or suppression on one hand, and the excessive abundance of the evacuation on the other, form complications analogous to those we have noticed in menstruation. The suppression of the flux, when followed by no constitutional disturbance, is an occurrence of a favourable nature. When, on the contrary, the suppression is accompanied by accident, the patient seems to have acquired a plethoric temperament, the pulse is full and strong, the face injected, and active congestions towards the head and chest show themselves. Venesection and abstinence from food relieve these symptoms at first; but where they recur frequently, another plan of treatment must be recommended, and mineral waters, the effect of which is to increase the discharge, seem in such cases to be fairly indicated. Yet their exhibition is not totally unattended with peril, because they may occasion any other form of hemorrhage, instead of that which it is the physician's object to solicit. For such cases, the use of lavements and of laxative waters should alone be prescribed; and as their exhibition is only temporary, it is needless for the patient to resort to the Spas. The excessive abundance of hemorrhoidal discharge has sometimes the debilitating effect we ascribed to superabundant catamenical secretions. The mineral saline waters, in these instances, are not on any account to be advised, because they destroy by their local action on the rectum the happy influence they produce on the system in general. The ferruginous wells of Schwalbach and Spa should then be preferred to the waters of Kissongen, Kreutznach, or Hombourgh.

Sterility.—When, after a few years of marriage, a lady has no family, her physician has two great remedies to prescribe, viz., sea-bathing, and the waters of Ems—formerly Forges and Spa were in vogue, but fashion has now decided otherwise. It is a melancholy but a true assertion that fashion, in the Spa question, has on our medical decisions an overruling influence. The once far-famed waters of Forges are now abandoned; and it is seldom that the old renown of Spa induces a physician to recommend its waters. We have nothing to say in this place of the sea-baths, the importance of which in the treatment of sterility cannot be an object of doubt. We will only point out the indications which should guide the physician in his choice between ferruginous and alcaline waters.

It is enough to reflect one instant on the numerous causes of sterility to be struck with the glaring absurdity of recommending *always* ferruginous waters as of old; or, as nowadays, the baths of Ems; or sea-bathing, without having well weighed the indications to be fulfilled by those powerful therapeutic agents. What throws, and will throw for a long time, discredit on the mineral waters is their empirical and indiscriminate exhibition. Unfortunately we must say, that if the physicians of watering places do not directly encourage the deplorable tendency, they do not endeavour to point out the special indications of their particular residence; and it is to the vagueness thus purposely allowed to spread over the matter, that we must attribute the all-powerful influence of fashion at the present day. Ems has the reputation of rendering all women fruitful, as Forges and Spa formerly had. This reputation is usurped like that of the supplanted wells, though not more unfairly acquired.

Whenever sterility is accompanied by a state of general plethora, with congestion of the womb, dysmenorrhœa, hemorrhoidal flux, obstinate constipation, &c., the waters of Ems will be undoubtedly useful. They modify the plethoric condition, facilitate menstruation, and restore the functions of the uterus, thus rendering conception possible. These waters are essentially sedatives, and by their alcaline nature increase the fluidity of the blood, and calm vascular excitement.

But if the blood has lost its natural plasticity, if passive hemorrhage be present, or dysmenorrhœa, or a chlorotic white discharge, it is evident that sterility will only become more incurable by the Ems waters; whereas it may be safely and certainly removed at Spa or Schwalbach,—ferruginous waters being evidently pointed at by the nature of the symptoms.

Suppose sterility be due to narrowness of the os tincæ; what advantage can possibly be expected from the waters of Ems or Schwalbach? It is evident that dilatation of the neck of the uterus by surgical measures is the only method which can be followed with success, and independently of mechanical dilatations, the local application of belladonna or datura stramonium on the straightened orifice.

If, on the contrary, the uterine fluxion recognises for its cause an evident rheumatic affection, the baths and douches of Wiesbaden should be preferred to all others. We will in another place speak of sea-bathing.

Dan. M'Carthy, D.M.P.

America.

Exostosis of the Scapula.—Dr. Marsden relates, in the *British American Journal of Medical and Physical Science*, the case of a man, aged 50, who consulted him, on account of a large immovable osseous tumour on the back part of the right shoulder, corresponding to the situation of the scapula. In form, it resembled an obtuse cone, the diameter of whose base was about six inches. At the inferior angle of the scapula was a small opening, connected with two fistulous cavities, the one running transversely inwards, and the other, and more considerable one, upwards and slightly inwards, from which an offensive purulent discharge constantly exuded. The introduction of a probe gave a rough grating sensation, as if rubbing against a rasp. The history of the case was as follows:—When about seven years of age, he fell from a gallery, and injured his shoulder; but no attention was paid to it for nearly two months after, when his parents, finding he had but a very imperfect use of his arm, took him to a bone-setter, who stated that the shoulder was dislocated, and pretended to set it. Notwithstanding this, he continued to suffer pain for four or five weeks longer, when it began to subside, and the use of the arm to return. When about ten years old, he perceived, for the first time, a hard tumour on the spine of the scapula, nearly the size of a filbert. It continued gradually to increase in size, but without pain; and when he had attained his 25th year, it was about the size of a hen's egg. From this time, until the month of February, 1844, it continued regularly increasing in circumference until it had attained its present size, when, for the first time, he felt lancinating pains, which increased until April or May following, when it suppurated. When Dr. Marsden saw the patient, in

August, 1844, he was pale and emaciated, suffering under great constitutional irritation, broken rest, impaired appetite, and disordered bowels, occasionally lax, but more frequently constipated. Dr. Marsden advised the removal of the tumour, but the patient would not consent. He permitted the fistula to be laid open, however, which was done, and several small pieces of carious bone were removed. A weak solution of nitric acid was injected into the wound, and medicine was administered to improve the patient's general health, until the end of November, when there was an irregular opening, about the same situation as the first one, and a cavity extending upwards, from which a purulent discharge continued to flow. The patient's countenance was pale and anxious; pulse 94, tongue red and clean, respiration slightly increased, pain in the right hypochondrium, occasional thirst, restlessness, and sleeplessness, especially during the night, urine sometimes scanty and high coloured, bowels more regular than formerly, but inclined to be lax, appetite much impaired. He also complained of coldness, occasionally followed by rigors, during which the pain in the shoulder was much increased. About 40 or 50 small pieces of carious bone had been discharged at different times. He now consented to the removal of the tumour, which was accordingly done as follows:—A director having been introduced into the fistula, upwards, it was laid open with a sharp-pointed bistoury to the top, and the incision afterwards extended upwards to the spine of the scapula, cutting down on the tumour with a scalpel. A transverse T shaped incision was then made in the direction of the spine, through the integuments, which were turned back, and the tumour was broken up with a pair of bone forceps and a small chisel-shaped lever, the whole of it being removed as far as the spine of the scapula. The tumour, excepting the carious portion, was extremely compact, hard and brittle, not having the slightest trace of cartilaginous substance. It was removed in various sized irregular pieces, without difficulty, and with very little hemorrhage, leaving a tolerably smooth and even surface. The portions removed weighed 3oz. 6 drachms. The supra-spinatus muscle, with its strong fascia, was almost wholly destroyed, and its place supplied by bone, and yet the action of this shoulder was nearly, if not quite equal to its fellow, showing how wonderfully nature adapts herself to circumstances. The wound having been cleared of spiculæ, was brought together with a roller, and a generous diet was ordered, with wine and quinine. The case went on very favourably, and within six weeks the patient had quite recovered.

Traumatic Tetanus.—Dr. J. McGirr relates in the *Philadelphia Medical Examiner* the case of a young woman, aged 20, of plethoric habit, in whom a dentist broke the second molar tooth of the lower jaw, and, after several ineffectual attempts to remove the stump, applied some caustic (supposed to be nitric acid) to destroy the nerve, and sent her home. Five days after the tooth was broken, tetanus came on; she had suffered excessive pain in the jaw from the time of the caustic being applied. When Dr. McGirr first saw the patient, on the seventh day after the operation, she had from one to four tetanic spasms every hour. The jaws were tightly locked; opisthotonos was severe; and there were pain and retraction at the epigastrium, returning every twenty or twenty-five minutes, followed by excessively violent paroxysms,—three generally succeeding each other within a minute's time. The temporal and masseter muscles were the seat of very great pain. The head was thrown back, and every muscle was in a state of rigid contraction. She answered, by signs, that there were severe pains shooting from the sternum to the spine. Swallowing was performed with the greatest difficulty. The belly was very hard and painful on being pressed; and when pressed, muscular twitchings agitated the entire body. These twitchings were constantly present between the spasms, and the muscles of the entire body were affected during the paroxysms. The muscles of the head, neck, throat, chest, extremities, hands, and fingers, were painfully contracted. The eyelids were drawn down tightly over the eyes; the patient could not move them; and when raised, the eyes were turned up, insensible to light, and the pupils largely dilated. The countenance was much distorted. The pulse was wiry and beating 130. There had been suppression of urine for 24 hours. A blister was ordered to be applied from the temple to the symphysis of the inferior maxillary bone, (to be dressed with morphia and mercurial ointment, and a warm poultice to be applied over the dressings), and bags of ice to the whole tract of the spine. When the ice was applied, a spasm immediately occurred, and it was removed; but when the patient recovered her consciousness (which always returned between the spasms), she made her attendants understand that she wished the ice replaced, which was done. One grain of morphia was ordered every hour, until stertorous breathing was induced, and perfect quiet was enjoined. The greater part of the night was passed badly,—the spasms recurring about every two hours, until four o'clock in the morning, when the patient fell asleep. She awoke without a spasm, motioned for drink, which was given to her, and swallowed with much less difficulty than the day before. The bowels were freely moved by a purgative. The eyes and eyelids were immoveable. The pulse 80, and full, and the skin moist. Suppression of urine relieved. She had several spasms in the course of the day, and vomited back a dark green matter; wine and morphia were ordered freely. The ice was removed from the spine. On the following day a blister was applied to the spine, and dressed with mercurial ointment. The patient was better, having had only two slight spasms. A quarter of a grain of morphia every two hours. The day after three injections were given, and free evacuations obtained. The catamenia, which had ceased naturally before the tooth was broken, came on again. She complained of pain in the temporal and masseter muscles, but spoke distinctly and lay quietly. She was now able to open her eyes, but was unable to see. On the next day, being the fifth from the application of the ice, she was much better; had only one slight spasm, and was able to distinguish objects. From this period she convalesced rapidly. Dr. McGirr states that the patient experienced, after the application of the ice, a delightful relief, as if an enormous weight had been removed from her chest; and that the spasms which occurred during the time the ice was applied gave her but trifling pain compared with those she had previously endured.

Miasmatic Fevers.—Dr. Upshur, in a paper published in the *Philadelphia Medical Examiner*, states that in the milder forms of *intermittent* fever it is a common and very successful practice, among the physicians of Lower Virginia, to exhibit at the onset of the cold stage an emetic and cathartic combined. The act of vomiting tends to remove congestion of internal vessels and organs, and, by forcing the blood to flow with greater rapidity through its channels, to disturb in a great degree the morbid action in the system; while the cathartic, which usually moves the bowels towards the conclusion of the hot stage, promotes perspiration, and prepares the frame for the reception of medicines which are proper to prevent a second paroxysm. The emeto-cathartic is usually composed of calomel gr. x., tart. emet. gr. ij. Opium given in the cold stage, according to Dr. Upshur's experience, is apt to hasten congestion of the liver and brain; to render the bowels still more costive, and thus to bring on a comatose state from which the patient seldom rallies. These effects especially follow the exhibition of the drug in cases of long duration of the cold stage, with great depression of the vital powers, constituting the *pernicious intermittent*. Blood letting in this stage, Dr. Upshur says, has been of great service; and he has no hesitation in subscribing to all the praises bestowed upon it by Dr. Mackintosh and other authors, with this restriction, however, that it shall be resorted to only in cases where the patient has not been much debilitated by previous disease. Large draughts of the cold infusion of Eupatorium perfoliatum Dr. Upshur has known promptly to relieve the distressing nausea attendant on the first stage of intermittents; and after frequent trials of this plant, Dr. Upshur is inclined to rank its tonic and anti-periodic properties little below those of quinine. During the hot stage, ice finely powdered, and exhibited in teaspoonful doses every ten minutes, or oftener, will be found useful. The patient should be kept moderately covered, and with a free circulation of air through the room. Sweet spirits of nitre will also be useful in this stage; and should there be much fulness of the head, with burning of the eyes and injection of the conjunctivæ, it will be proper to take a few ounces of blood from the arm. As soon as the hot stage begins to decline, shown by the appearance of slight moisture on the palms of the hands, Dr. Upshur recommends the use of the sulphate of quinine to be commenced; and as it is impossible, when called to a patient attacked by fever, to determine what type it will assume, and it is of vital importance generally to ward off another paroxysm, Dr. Upshur administers the remedy in from 3 to 5 grain doses every two hours until the patient complains of noises in his ears. It has long been known that cinchona and its preparations, when exhibited in considerable doses, will produce such noises in the ear as buzzing, ringing, roaring, &c.; but Dr. Upshur is not aware that it has heretofore been proposed to *consider such effects as demonstrative of the entire subjection of the system to the influence of this remedy*. It is to this point, then, as one of considerable importance in the management of miasmatic fevers, that he wishes particularly to direct attention. According to Dr. Upshur's experience, if the disease do not yield when these effects have been produced, it must be combated by some other remedy. Sometimes four grains will produce the required effect; sometimes it requires 40 grains; and sometimes incredibly large doses will fail to accomplish it. Cases of the last description, according to Dr. Upshur's experience, terminate fatally; while, on the other hand, he has never lost a patient when quinine had affected the head in the manner above described. Dr. Upshur believes that the action of quinine upon the system is perfectly incompatible with that of malaria—therefore, if it require but a *single grain* to render harmless the poison, given, and whether it will require a grain, a drachm, or any quantity greater or less than either of these, may be ascertained by reference to the effect produced upon the patient's head. Dr. Upshur has, since March, 1844, treated ninety cases of intermittent, and fifty-eight cases of remittent fever, in all of which quinine was exhibited until the head felt its effects. All recovered; and in no instance did harm result from this manner of giving the medicine. In a few cases the patients were disposed to be restless, but a simple purgative, and one night's sleep, were sufficient to carry off every unpleasant symptom. Dr. Upshur has never seen a recurrence of the paroxysms, nor in remittent fever the continuance of the febrile action for more than eight hours, after ringing, roaring, or buzzing in the ears supervened. He, therefore, instead of recommending quinine in doses, and at intervals, according to the type of the fever, in every instance gives it in large doses every hour or two, until the patient complains of the peculiar sounds indicated.

England.

Rupture of the Bladder: Recovery.—Mr. Chaldecott records in the *Provincial Medical and Surgical Journal* an interesting case of rupture of the urinary bladder. The patient, a healthy and temperate man, aged about 30, at about 12 o'clock on the night of Tuesday, the 7th of April, having passed two or three hours at a concert, ran across the street to empty his distended bladder, and the night being dark, he did not see a newly erected post, with the top of which the lower part of his abdomen came in violent contact. He fell, and with great difficulty reached his home, which was about a hundred yards distant. Mr. Chaldecott found him, about half an hour after the accident, faint, and suffering severe pain over the stomach and belly, with desire but no power to pass his urine. None had escaped into his clothes, and Mr. Chaldecott's suspicions as to the nature of the mischief, were confirmed by the circumstance of nothing escaping through a full-sized catheter which was passed easily and completely into the bladder. The patient was placed in bed, and hot fomentations were used to the belly until reaction took place, with which came increase of pain over the stomach and abdomen. Twenty leeches were also applied, and a gum catheter was now passed; but with the same unsatisfactory result as before, not a drop of urine escaping through it. Afterwards the catheter was passed every three or four hours, although up to two o'clock, p.m., fruitlessly. Mr. Key was called into consultation; and saw the patient about 18 hours after the accident, by which time the symptoms of peritonitis had increased to an alarming degree. The belly was painful, swollen, and tender; the pulse rapid and feeble, and the countenance anxious. Mr. Key passed a catheter (none having been used for the previous four hours), and about an ounce of bloody urine came through the instrument. Mr. Key concurred as to the nature of the injury and the nearly hopeless prospect for the patient. At ten o'clock two scruples of liquor opii sedativus were administered, which after a few hours produced some comfortable sleep, and about four hours from the time of Mr. Key's visit the catheter was again passed, and about four ounces of clear urine were drawn off. From this time, the pain, swelling, and heat in the stomach and abdomen gradually lessened, and it was evident that the bladder now held, as on each introduction the catheter brought away clear urine. From this time until the 13th (that is the sixth day from that on which the accident happened) all went on well, excepting that a smart attack of gout occurred on the 10th, although the patient had never before suffered one; but on the 13th, from a strong desire to become independent of the catheter, the patient made straining efforts to pass his water, and he had scarcely passed a tablespoonful, when he felt something give way, and a burning pain all over his stomach and bowels, as if boiling water had been poured over them; the same symptoms of faintness and distress occurred as when the accident first happened. Mr. Chaldecott saw him a few minutes after this re opening of the wound in his bladder. On using the catheter, not more than a teaspoonful came through the tube. He had now again the symptoms of peritonitis, with the addition of incessant sickness. The same plan of treatment was again adopted—viz., fomentations, leeches, and a full opiate, with

calomel. About four hours after, on the introduction of the catheter, the bladder was again found to retain the urine; and although the peritonitis had increased to a severe degree, the pain, tenderness, and [illegible]ness gradually subsided; and by a patient submission to the continued use of the catheter for a fortnight, no more interruption to the patient's amendment occurred, excepting that the gout, which, under the use of colchicum, had nearly disappeared, again became severe, perhaps from the fresh absorption of the urine which this second accident had permitted to escape into the cavity of the peritoneum. The patient now feels no inconvenience from his accident except a dragging sensation over the abdomen, chiefly on the right side, which is much increased when he attempts to lie upon his left side.

Abscess of the Liver.—Mr. Norris reports in the *Provincial Medical and Surgical Journal* the case of a man, aged 29, who suffered severely from an affection of the kidneys during six weeks, followed by acute hepatitis, which did not yield to the usual remedies. Hectic fever set in with frequent shiverings, and at the end of six weeks there was a fluctuating tumour in the right hypochondrium, without any external sign of inflammation; the feverish excitement increased, and his sufferings became more and more urgent, and it appeared certain, that the disease had terminated in abscess of the liver. Under these pressing circumstances, an incision was made an inch and a half in length, through the most prominent part of the swelling down to the peritoneum; the wound was plugged with a roll of lint to keep it open, and covered with a poultice. At the end of six days, a large quantity of purulent matter, tinged with bile, escaped through the wound. A probe was passed into the aperture three inches. This discharge continued flowing abundantly for a fortnight; the hectic symptoms speedily subsided; the appetite and strength returned. Seven weeks after the operation he followed his employment, and has enjoyed uninterrupted health during 7 years, although the wound oozed a little thin fluid two years before it closed.

[The following are the only articles of interest to the profession in the last Number of The Lancet.]

Popliteal Aneurism.—Dr. Armstrong reports a case of popliteal aneurism which came under his treatment in the Royal Naval Hospital, Plymouth, and in which the superficial femoral artery was absent. The patient, a sailor, aged 26, was admitted into the hospital on the 31st October, 1845, with a left popliteal aneurism, about 3½ inches in length, and of an oval form, extending from the middle of the popliteal space downwards between the heads of the gastrocnemii muscles; the pulsation in the tumour was distinct and strong. After a short time spent in attention to the general health, it was proposed, to take up the external femoral artery, in preference to the less certain and more tedious method of treatment by compression. But here an unusual and unexpected difficulty interposed. The superficial femoral artery did not exist, and the same abnormal state of the vessels was found in the right thigh. The common femoral artery could be felt passing over the brim of the pelvis, and for nearly an inch and a half below it, behind a cluster of enlarged and lobulated lymphatic glands, some upwards of an inch in length, and then sank deep into the thigh; the only artery that could be traced was one under the vastus internus, and running down close upon the bone; a pulsation could also be felt under the vastus externus, but these vessels did not appear to be of any magnitude. The popliteal artery could be distinctly traced for nearly 1½ inch above the tumour. Compression was now considered worthy of a trial. The tourniquet, fitted with two pads, and a screw to regulate the pressure, was applied on the 4th of Dec., one pad being placed immediately below the patella, and the other over the tumour. The iron arch of the instrument was carefully secured to the side of the leg by a roller. On the 10th of February the pulsation was strong, and sometimes there was a violent throbbing, although the size of the tumour had diminished. On the 2d of February there was an obscure pulsation, and the tumour had greatly diminished in size; a distinct pulsation, which had not before been observed, was now felt behind the external and posterior edge of the tibia, extending upwards of an inch above the aneurismal tumour, and evidently unconnected with it. On the 14th, the pulsation of a vessel was detected on the inner side of the tumour, and none could be felt on the popliteal artery. On the 4th of March, after a careful examination of the part, no pulsation could be detected. The remains of the sac formed a dense, flattened mass, of about an inch and a half in length; the pulsation of the vessels behind the head of the tibia had increased in force, and these vessels apparently formed the channel through which the circulation was carried on. Moderate pressure was continued some little time longer, however; and by the 20th of March the sac had almost entirely disappeared, and was reduced to a small dense mass not larger than an almond in size.

Perforation of the Duodenum.—Mr. Stitwell, of Epsom, records the case of a gentleman previously in good health, who suffered during three days from slight uneasiness in the stomach and bowels, not sufficient, however, to prevent his following his customary avocations. On the 29th of May, after passing several hours on horseback, he was seized, at a short distance from Epsom, at six o'clock, P. M., with violent pains in the stomach and bowels, which obliged him to alight, and seek a place to lie down. He entered a farm-house, and threw himself on his abdomen, in great agony, seeking relief from pressure. A considerable quantity of brandy and hot water was administered, with some slight abatement of pain. About half an hour after the patient's entering the farm-house, Mr. Stitwell saw him. He was then lying on his back on a sofa, in a state of collapse; complaining of severe pain in the region of the stomach, his countenance livid, extremities cold, and pulse not more than 30 in the minute. He was placed in bed, warmth was applied externally, and warm diluents were plentifully administered; the natural temperature was by these means restored, and the pulse rose to 60. Medicines to evacuate the bowels, with injections, were given without effect, slight fœcal discharge only being obtained without relief. Up to ten o'clock on the morning of the 30th of May, things continued much in the same state, the paroxysms of pain being very severe, and the symptoms very violent. At 12 o'clock symptoms of collapse came on, and the patient rapidly sank, retaining his intellectual faculties till the last. There was only one attempt at vomiting during the progress of the illness. On examination of the body after death, the external appearances were found to be discolouration and tumefaction. A large quantity of offensive gas escaped on opening the abdomen. An ulcer larger than a four-penny piece was found perforating the duodenum on its anterior surface near the pylorus. Through this perforation a large quantity of fluid had escaped into the peritoneal sac. Some coagulable lymph was effused. From the thickening of the edges of the ulcer and the want of morbid vascularity the disease appeared to have been gradual in its progress, and of lengthened duration.

Dislocation of the Astragalus.—Dr. Hosking, of Sidney, relates the case of a young man at 26, who jumped down three or four steps, and fell on the ground. On examination, the left foot was found to be dislocated and turned inwards and upwards, with a lump on the back of the foot or instep, appearing shining and glossy under the skin. The astragalus had evidently been thrown out of its place on the dorsum of the foot. The patient being faint, Dr. Hosking made extension at the same time that he pressed with both thumbs on the displaced bone, having the palms of both hands under the os calcis. The astragalus immediately slipped into its place, and the shape of the foot was restored. The patient recovered without a bad symptom, and in a few days was able to get about with the assistance of a crutch.

Intus-Susception.—Mr. Alfred Markwick relates the case of a child, aged four months, brought to him in consequence of a discharge of blood per anum and from the stomach, which commenced a week previously. The hæmorrhage came on suddenly, and continued abundant and frequent, especially from the bowels, the napkins containing nothing but pure blood. The evacuations from the stomach consisted of a thick greenish-yellow matter, abundantly studded with white particles, and only slightly mixed with blood. This matter was not vomited, but passed from the mouth without effort, and as if from regurgitation, produced by reversed peristaltic action. The child's countenance was pale and exsanguine, and the pupils were slightly dilated; but there was no anxiety about it indicative of any serious internal mischief. The pulse was weak and frequent, and the abdomen slightly distended and tender. There was also occasionally sudden and violent screaming. The child had been continually ailing from birth, and at six weeks old it had an attack of hæmorrhage, from which it gradually recovered. The child gradually got worse, the regurgitation increased, and the abdomen became more and more distended and painful. At last the screaming ceased, and the discharge per anum, which still remained without any admixture of fæcal matter, changed in colour from a bright-red to a dark grumous-brown, with a very fœtid, gangrenous odour, and at length became arrested by death. On post-mortem examination, a large quantity of a thick greenish fluid, was found in the stomach, which organ was, with the exception of a few dilated blood-vessels, perfectly healthy. The small intestines were remarkably distended to within a small distance of their termination, where they were contracted. On slitting them open a large quantity of yellow fæcal matter made its escape, and on approaching the cæcum it was discovered that the whole of it and the colon had become invaginated or intussuscepted in the sigmoid flexure of the latter, from which it was impossible to withdraw it in consequence of the firm adhesions that had taken place. The appendix vermiformis projected from between the inverted and the containing intestines. The rectum was much contracted, and contrasted remarkably with the enormous dilatation immediately above it. In order to ascertain the state of the contained parts the sigmoid flexure was slit open from below, and the numerous adhesions divided. The appearances which then presented themselves were as follow:—The inverted portion (consisting of the cæcum and colon, and a small portion of the ileum) was reduced in length to about three inches, and completely gangrenous, while its canal was entirely obliterated by numerous large red masses resembling organised coagula. These were apparently the glandulæ solitariæ considerably hypertrophied and congested; for when cut open they presented a similar cavity, only much larger.

Fatal Suppression of Urine.—Mr. H. Tovey relates the case of a remarkably healthy tall man, in the 49th year of his age, who was attacked, on the 20th of February last, with uncomfortable feelings, lassitude, and loss of appetite. His tongue was moist, and slightly coated, pulse natural; abdomen soft and perfectly painless on pressure. He had passed only a few drops of urine during the day before, and had no inclination to micturate. The abdomen was not in the least distended. Purgative medicines were prescribed, with fomentations to the perinæum and abdomen. On the 27th no urine had been passed. The medicines had acted on the bowels once only, and the stool was watery and bilious. A warm bath was ordered, and leeches were applied to the perinæum. The purgative medicines were continued on the 28th. Bowels acted freely three times; passed a good night, free from pain; head quite comfortable; skin moist; tongue a little coated; pulse natural; passed no urine, nor had the slightest inclination. Upon a careful examination of the loins, there was a slight uneasiness upon pressure on the right side. Ordered twelve leeches to the right loin, and to continue warm baths and fomentations to the perinæum and loins. Also, chloride of mercury, two grains; compound extract of colocynth, six grains. Mix for two pills, to be taken at night. Spirit of nitric ether, three drachms; tincture of squill, two drachms; tincture of henbane, forty drops; water, five ounces and a half, mix. A fourth part to be taken every four hours. On the 1st of March the patient was the same in every respect. On the 2d and 3rd he continued the same, except that he was occasionally sick, and vomited a greenish fluid. He had not the slightest inclination to pass urine. On the 4th, Mr. Callaway saw him, when a catheter was introduced, without giving exit to any urine, however. On the 5th he became much worse; pulse 104; great thirst; countenance much altered, and anxious; mouth clammy, and tongue getting dry; abdomen fuller, but not tender; the bowels had acted freely, and a tape-worm of considerable length had escaped in one of the motions; he still passed no urine. The medicines, warm bath, and fomentations were continued. On the 6th he was evidently worse; thirst distressing; mouth so clammy and dry as to render articulation indistinct and imperfect; quite sensible, but somewhat confused in answering questions; pulse 100; abdomen fuller; but he so feared an operation, that he would not allow his abdomen to be very accurately examined even by the hand. It would have been desirable again to introduce the catheter, as, from the increased fulness in the abdomen, urine might possibly be now present, but he would not consent. The same means were persevered in, but he expired the next morning, at about nine o'clock. There was little or no coma, and he retained his senses to within half-an-hour of his death. It is much to be regretted that a post-mortem examination could not be obtained. The only cause that could be assigned for the suppression of urine was intense mental anxiety.

Travelling Impostor.—A young man, calling himself brother to Dr. Golding Bird, has been for some months past endeavouring to obtain contributions, under various pretences, from medical practitioners in different parts of the kingdom. Some time ago he visited Bristol, Cheltenham, Worcester, and others of the midland towns; he is now travelling in the eastern counties. It is scarcely necessary to state that his claim of relationship to Dr. Bird is merely assumed for the purpose of gaining access to, and attention from members of the profession.

The fourteenth session of the Scientific Congress of France will take place at Marseilles on the first of September next. The session will last ten days, and the discussions will be divided under six heads, of which one will comprehend the Medical Sciences.

ORIGINAL LECTURES.

ANATOMICAL MUSEUMS; THEIR OBJECTS AND PRESENT CONDITION.

By R. KNOX, M.D., F.R.S.E.,
Corresponding Member of the French Academy.
[Continued from p. 309.]

Of the Method of Preserving Anatomical Records by mere Description—Drawings; coloured or otherwise—Paintings in Oil; their Value—Wax or Plaster Models in relief—Dr. Thibert's Models—Drawings of Skin Diseases—Uterine and Eye Affections—Experiments of Dr. John Thomson, of Edinburgh, and Cruveilhier—Dr. Carswell's Drawings—Cause of failure of existing Museums—Deficiency of Baillie's and Hunter's Museum—Wax Models—Modelling Pathological Appearances—Objections to it—Encaustic Method of Painting—Sir Charles Bell's Models—Anecdotes.

No one has ever maintained that in mere descriptions we have a sufficient record of the changes produced by disease in the organs of man and of animals. From Morgagni to Cruveilhier the same remark is strictly applicable; they leave a something to be desired; they are not, they never can constitute, sufficient records of diseased structure. Valuable, no doubt, and never to be omitted, they can only be looked on as aids to more efficient methods. Many, however, maintain a different opinion in regard to the value of drawings or paintings in water or in oil colours, and some may even think them equal in value to any other form of record we now possess. I shall therefore take the liberty of making a few remarks on the supposed value of drawings, coloured or otherwise, as a substitute for actual structures or models, and casts in relief, made from the actual structures, and coloured after nature. Those who maintain that oil, and especially water-coloured drawings, are of great value as anatomical records, are not, I think, practical men. I say this with great deference, however, for I know amongst them men of the very highest reputation for what is usually called practical knowledge, that is, men who are of the very highest rank as practical physicians and surgeons. But what I mean is this, they have had no opportunity of testing their favourable opinion of water-coloured drawings. Had they taught pathological anatomy to large classes, as I have done, not merely of students but of medical men, a vast number of whom were their own contemporaries, they would soon have learnt the inadequacy of such representations in conveying to the mind of a general audience any *solid durable impressions*. I understand that it is very generally admitted by artists, and others who have studied this matter, that no vivid and correct idea of any object, *which should be seen in relief naturally*, can ever be conveyed to the mind by a representation on a flat surface; there seems to be a peculiarity in our visual perceptions in this matter. Pictures are deceptions, not realities: they do not even aim at deceiving so far; wax or plaster models in relief represent the actual object in all its rounded or angular forms: there is no deception here as regards mere sight, the perceptions are consequently just, deep, and lasting; the shadows natural, not mere surfaces painted of a dark colour to deceive the eye, as in drawings. In the model in relief as executed by Dr. Thibert, whose ingenious discovery it is the chief object of the lecture to explain, every surface is coloured as in nature: in paintings or sketches every one knows it is not so, and cannot be so. It is absolutely useless showing pathological drawings to classes and students: they are not regarded; in fact, they do not teach; they are ineffective deceptions, and have very generally ceased to be employed. Now, as regards the pathology of such diseases, as appear on the surface, I can speak with equal certainty and decision. In my younger days, I read all the illustrated works on skin diseases, on eye affections, and on Syphilis and Syphiloid disease; also on that class of uterine affections, which are not within the range of direct vision, and I cannot say that I ever derived the smallest practical information from such works. The impressions seem all too vague. I have spoken with hundreds of medical men on this point, and literally with thousands of medical students, and they have very generally agreed with me. What I mean is this no lasting impressions can be derived from such source. A singular instance (repeated again, has been seen very lately in a London Hospital, occurred to me, so highly illustrative of the difficulty, not to say impossibility, of deriving any positive information from drawings, however faithfully made, however beautifully coloured, that I cannot forbear alluding to it. I mean the occurence of at least two cases of glanders in man, which were not recognised in a London Hospital, notwithstanding the great efforts of Dr. Elliotson to make the disease universally known. But, as if it had been intended that the question of the utility of coloured drawings, (water coloured,) should be settled at once, and for ever, two experiments were made, as it were directly with this view, the first by Dr. John Thomson of Edinburgh; the second by M. Cruveilhier of Paris.

Dr. Thomson, apparently being convinced of the inutility of description whether written or delivered *vivâ voce*, in conveying to others ideas of disease, and of diseased structure, and equally convinced by what he saw going on in the museums of Pathological Anatomy, that they also had proved a failure, next attempted the method of coloured drawings on the most extended scale. To effect this, he employed a Mr. (afterwards Dr.) Carswell, who for many years drew and painted for Dr. Thomson every form of pathological disease. This vast collection of paintings is said to have cost between 2000*l.* and 3000*l.* sterling, yet all to no purpose. Exhibited annually to a few students, they seldom think it worth while examining them, and never hope to derive any practical benefit from their inspection. Look at the great effort of M. Cruveilhier! I allude to his pathological work with figures, engraved and coloured after nature, with admirable descriptions superadded, and yet practical men do not value it!

It is now time that I should explain why the existing museums have also failed, though composed chiefly of the actual morbid parts, removed by operation or after death, deposited in preserving liquids of which the best no doubt are alcoholic liquors, somewhat diluted, and set up to the best advantage in crystal jars, secured as well as may be from evaporation, &c., hermetically sealed, if possible; others dissected, and dried and varnished, &c. &c.; all being still the actual diseased structures themselves, which it is attempted to preserve. On this point I shall be brief, contrary to the expectations, no doubt, of many, who might suppose that I would here enter into a laboured proof of the inutility of museums so formed. But, on the contrary, I shall be extremely brief; for

1st. The profession nearly, in a body, have declared them to be an entire failure, by never visiting them, in fact, by taking no interest in them whatever. This is notorious, and I could state some singular facts in support of it, were it necessary

2. Small collections of such preparations must be entirely useless to schools of medicine, even if they gave any accurate information, which they do not.

3. All structures immersed in spirituous or other preservative liquors, in time lose their *natural colour*, and suffer other injuries, as hardening, softening, corrugation, &c. &c.; in short, in a few months, they generally are scarcely recognisable, even by the person who set them up.

4. To particularise any class of morbid structures which suffer by immersion in spirits, and by loss of colour, alteration in texture, &c., become quite useless, is perfectly superfluous, seeing that the mischief extends to nearly every class. Admitting that in certain pathological changes, mere form is often the important point to be shown, yet even here the preparation has lost most of its value by loss of colour.

5. The form of the phial distorts the structures, giving rise sometimes to ridiculous mistakes, and always to error when the person examining is not well acquainted with the anatomy of the organ.

6. The knowledge of a valuable fact in anatomy bearing on practice or on science is limited merely to the museum in which the record stands. I myself visited Paris twice, merely on purpose to examine a single preparation.

7. To secure the preparation and set it up neatly, the dissection is generally delayed until it can be made at leisure, and thus on innumerable occasions I have seen, and regret to say have myself been the cause of disappointing hundreds of practical men from seeing the structures examined in a fresh state, the only time when they ought to have been examined by the whole body present: when shown some weeks or months afterwards, suspended in their crystal jar, they were totally useless, or nearly so.

8. When put up and secured carefully in their jars, the preparations cannot be taken down and examined without great expense and trouble.

9. And lastly, the renewal of the spirits, the re-setting up, the trouble and time, the making fresh sections, cause an expense which even wealthy corporate bodies begin to complain of as oppressive, and leading to no practical results.

These insurmountable difficulties lead practical men constantly to devise other means of preserving records of disease; above all, the existing museums have never been, and never can be of the smallest use to the profession. Look at Baillie's Collection in the College of Physicians, and at Hunter's in London, as forming pathological museums, deficient at least in four great classes of disease; namely, uterine, cutaneous, syphilitic, and eye diseases; for these the museums have always been totally useless; but it is now evident that they do not furnish practical results, even as collections of morbid anatomy; hence arise 1st., more lengthened descriptions; 2nd., pictorial representations; and these having also failed, at least in the opinion of those teachers, who are also anatomists and practical men, a third method came to be thought of, namely, modelling or casting in wax; also in plaster casts, painted with *wax painting*.

I have not seen the much praised, and no doubt extremely beautiful wax models of Florence, coloured after life, but I have seen two considerable collections in this country, and from these it is easy to judge of all others. The remarks I shall make on wax models are as follows:—

A wax model has an immense advantage over all manner of drawings whatever; it is a model in relief, or perhaps a cast, it does not absolutely matter which, coloured after life, and therefore perfectly calculated to give to the eye a just and a permanent impression. But models or casts of *healthy structure*, or of what we call plain elementary descriptive anatomy, ought not to be tolerated within the walls of any school of anatomy, and it gave me real pain to see, as I happened to do last summer, a medical student studying the brain from a wax model of the brain, within the walls too of a school eminent for practical men in every department of our art. I was afflicted to see so great a defect suffered to exist in an otherwise great and admirable institution, and I could with much pleasure have assisted in reducing these models, which have been so much praised by ignorant and thoughtless persons, and which are one and all of them incorrect, into the shapeless mass of wax out of which they were originally formed, that thus converted into tapers, they might give light—in their present form they only spread darkness. I have already explained myself sufficiently on this point; with all sound anatomists and surgeons, I hold all attempts at representing the regular or normal structure by any contrivance whatever, as quite destructive of the best interests of the students.

But the same objection does not lie against the modelling in wax pathological appearances or changes, whether on the surface or in the interior of the body; others do, however, and we shall find them neither few nor trifling.

For, 1st, the colouring gradually fades, and not only the beauty of the model vanishes, but its value is destroyed in a few years. 2d. All the wax models I have seen require to be protected by glass, and are therefore mere toys. They suffer then from heat, trifling accidents, as blows, from mere handling, from dust; they cannot be multiplied easily and cheaply, so as to be made available to the 20,000 medical men scattered over Britain;

they are not serviceable to humanity; their expense or cost forbids their general use. That some of the difficulties might be got over I do not doubt but never perhaps wholly so. The late Sir Charles Bell had a method of making some very beautiful models in relief: they were, no doubt, rather casts than models, and seem to have been made in this way; I say *seemed*, for he kept his method a secret from me at least. First, a plaster cast was made, and over this a layer of white wax was placed, and this was painted; but whether with oil painting or, what is more probable, with wax painting, oil not having been used at all, I do not venture to say. This wax painting, if it were so, has a good effect. It might be that certain of Sir Charles's models were merely plaster casts painted with wax painting. This mode of painting was, as it would appear, the only method used by the ancient Greeks and their imitators the Romans; they called it the encaustic method, because they exposed their pictures whilst painting to the action of a strong fire. Dust does not seem to injure them; but Sir Charles's models or wax paintings can neither bear dust nor fire.

Many years ago (in 1825-26) I made several attempts, aided by some artists, my students, to discover this mode of painting plaster or wax (but especially for obvious reasons plaster casts) with wax painting, but did not succeed. Mr. Benjamin Bell did so, however; but he also kept his method a secret. I believe I know the method now; but think it quite inferior, for many reasons, to the models I have now to speak of—those, I mean, made on the method of Dr. Thibert.

Rightly to understand, and therefore correctly to appreciate, this great work of art, the museums set up by Dr. Thibert in London and in Paris ought to be visited and carefully examined. Besides representing every form of disease, internal and external, so as greatly to resemble life, these plaster-painted models are of a hard and firm material unalterable by dust or handling, or by exposure to climate. The models of Dr. Thibert are not delicate toys requiring to be sealed up under glass, and shown occasionally as varieties never to be handled. The colours are indelible, and they are *oil colours*, the full import of which will be understood by all artists. The expense, compared with any other mode of forming a museum, is absolutely trifling. They may be multiplied indefinitely, and thus the improvement of an art, depending most frequently on pathological discoveries, will no longer remain shut up in the museums or cabinets of the mere anatomist, or buried in the metropolis, but be extended rapidly over Britain. Since I first saw Dr. Thibert's museum, forming, as it does, an absolute contrast with the existing pathological ones, I have often thought on the immense advantages which would accrue to humanity by their introduction into the various hospitals and medical schools of the empire; before me stand a series of models, illustrating to the life all the external symptoms, and the changes on the internal organs produced by that most frightful contagious disorder, acute glanders in man. Several years have now elapsed since the descriptions of its discoverer, Dr. Elliotson, have been before the public, and read by us all. French physicians and pathologists had given us spirited water-coloured drawings of the same disease, but all to no purpose, as it would seem, for I have myself, as I have already stated, witnessed the medical staff of a large hospital mistake the disease for erysipelas; and although I was aware the moment I saw it, that no such case had ever occurred to me, although I could not fix on its name, yet begged of them to consider well what it might be, assuring them that I had never seen such a case; they persisted in their false diagnosis until they were put to rights by the sheriff of the county. And yet all of us had read descriptions of this disease, and had examined drawings of the appearances by the first masters; still these did not enable any one of us to recognise the disease. Had the model made by Dr. Thibert, and now before me, been in the adjoining room, the result must have been different. Again, look at the recent medical history of malposition of the uterus, and think what a mass of mistakes, false diagnosis, erroneous, and sometimes destructive, treatment might have been avoided by the profession years ago, had these models been known to the profession, as they ought to have been; and how easily might they have refuted those claims to originality brought forward of late in a most unblushing manner by a Scotch physician!

Consider how accurately these models fix the correct ideal of pathological changes, putting an end to all doubts and unreasonable scepticism, and forming at all times a pivot or foundation on which the profession may base and calculate on future progress: then shall we cease to wander in circles. By these means only can we hope to render diagnosis perfect.

In advocating thus strongly the method of Dr. Thibert, it will not, I hope, be imagined that I recommend the removing from museums all anatomical specimens; on the contrary, there are many points of disease which can be well illustrated by the present method. Other structures again, perhaps all if possible, should be carefully and rapidly dissected in presence of those interested in the case, whether students or otherwise; the parts may then be secured unostentatiously, and at the smallest possible cost, in dishes, closed in and put aside for future reference, a number being put on corresponding to the model. All this may be done at scarcely a thousandth part of the present expense; as fresh diseases appear new models are added, the model and the fresh pathological specimen being carefully compared with each other. Hospitals and physicians the most remote from large towns, would in this way have before them rapidly every organic change which occurred; and thus would they have before them models of disease sure to enable them to diagnose with certainty. Many Metropolitan Hospital physicians and surgeons may derive benefit also, as the following anecdote will sufficiently illustrate:—A lady had consulted some of the first accoucheurs in town respecting a diseased state of the uterine system, which those gentlemen ascribed to the presence of a fibrous tumour. Some doubts were raised as to the diagnosis, and the case was referred to an anatomical surgeon. It so happened that both parties,—namely, the leading accoucheur, and the surgeon, visited Dr. Thibert's museum; the former disdained even to look at the models exhibiting uterine disease; the latter examined them with the highest interest, and, instructed by what he there saw, proved next day, on examining their patient, that the accoucheurs had mistaken a common malposition of the uterus for a fibrous tumour. Inordinate self-conceit is a sad drawback, even to the best instructed.

There is before me a series of models exhibiting at a glance the changes produced on various textures by scorbutus—a somewhat rare disease, but one which still does occasionally occur, and I cannot refrain from illustrating the advantages of this innovation by relating what happened a few years ago in a large Metropolitan Hospital. A distinguished London surgeon was examining these models with me, when, seeing a specimen of disease affecting the palate and upper jaw, he asked me particularly what it represented. Dr. Thibert's work showed it to be the representation of scorbutus, affecting that part of the body. My friend, however, the surgeon, assured me that in his case the person was affected with gout; nevertheless, the model gave him the most perfect representation of the case he had seen for many years previously. On mentioning the anecdote to a distinguished London physician, he related to me what he knew had occurred in the practice of Sir A. Cooper, and in presence of a large hospital staff. A scorbutic case, such as I now speak of, was mistaken by that eminent surgeon for a malignant disease of the mouth, hopeless in its results. On his leaving the ward, the servant in attendance, an old sailor, told the students that the case was merely scurvy—that he would cure it in a few days; which he did.

In conclusion; to practical pathologists I believe it unnecessary to recommend this innovation by any further arguments. They must have experienced as I have often done, vexation and disappointment on finding after the lapse of a few days and immersion in spirits, how irretrievably altered for the worse were the best preparations of morbid structures, more especially were lost the very points they had wished to display. Let these recollect what they have seen happen to specimens of pulmonary apoplexy, of acute pericarditis, of inflamed and ulcerated larynx, of acute dysentery. They have only to recollect what they must know, that by loss of colour after severe and fatal flooding the dissector, with young sight and abundant industry, has been unable to recognize a muscle from the adjoining aponeurotic, tendinous, and cellular tissues. In their hands, then, I may safely leave this matter. To the practitioner in medicine I would say, form proper pathological and diagnostic museums, and take them under your own charge; remove them from the hands of those who have no common interest with the profession; then, and then only, may we expect to find reversed the statement made by a distinguished physician, "Practical men take no interest in anatomical museums."

I had intended to say a few words respecting the objection which some distinguished friends have made to these models of Dr. Thibert, on the ground that they do not sufficiently represent structure. But a little reflection convinces me that such objections are not solid. Nothing in nature is recognized by *practical men*, by the medium of *structures*, that is, minute structure. No drawing represents in the slightest degree *minute structure*, and I am convinced that by reflecting on this point these gentlemen, whose opinions I highly value, will soon be convinced of the correctness of this view.

London, 16th May, 1846.

A COURSE OF LECTURES ON DISEASES OF THE SKIN.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XVI.

ACNE.

According to Willan, and others.

GENUS.	SPECIES.
Acne.	Simplex Punctata Indurata Rosacea

As proposed by Startin.

GENERA AND SPECIES.	DIVISIONS.	FORMS.
ACNE		
Simplex Pustulosa Rosacea vel Erythematosa	Localis Generalis	Disseminata Confluenta Inveterata

Gentlemen,—The cutaneous disease which will this day engage our consideration, presents well-known external characteristics; inasmuch as the face is the part of the body chiefly affected, and consequently the malady is not only under the observation of the patient and his friends, but of the casual observer. This complaint, known commonly as the Pimply or Carbuncled face, Worm or Grub Pimples, Copper Nose, Grog Blossoms, Rosy Drops, &c., is designated *Acne* by most writers on maladies of the skin, though the distinct application of this term, to the forms of eruptions it comprehends at the present day, is due to Willan, who, as I have had occasion to observe, must be held answerable for the fitness of much of our cutaneous nomenclature. It is very uncertain whence the term acne is derived, or what is its precise signification. The Baron Alibert, with his customary poetic license, considered the meaning of the term as equivalent to the Latin sentence, "*vigor flos juventæ*," which would be instituting a comparison between the pimples of acne and the blossoming of youthful charms at the age of puberty. But it is useless to dwell upon verbal disquisitions, when as practitioners and pathologists, it is only necessary, that we should obtain a precise knowledge of the morbid phenomena which are to be ranged under any given denomination. ACNE may be defined to consist in a non-contagious chronic inflammation of the *sebaceous follicles* of the dermis, (chiefly of the face) demonstrated by increase or change in their secretions, the retention of which in

the follicle, commonly ends in the production of inflammation and tubercular pimples, slowly suppurating and ending in a small serous scab, each spot being accompanied with more or less surrounding redness, of a violet or brighter tint; which appearance is also continued in the small cicatrix following the healing process. The contents of the pimples may commonly be protruded from the follicle by pressure with the fingers in a filiform shape, resembling a white or yellowish worm, or grub, of varying dimensions and consistence; the point, or external extremity, being often of a dark or black colour, from contact with the dust and dirt of the surface; this secretion, when examined under the microscope, is found to consist of oily sebaceous matter, in which now and then a microscopic insect (the *acarus folliculorum*) and its exuviæ can be discovered. It is observable also that the eruptions of acne are successive, and tend to resolution, rather than the ulcerative process; but that the sebaceous depositions, the tubercular pimples, the suppurations, slight crusts, and cicatrices, are commonly found co-existing.

The animalcula alluded to in this definition was discovered in 1842 by DR. SIMON of Berlin, who describes it as an articulated insect of considerable size, $\frac{1}{100}$th part of an inch in length, and $\frac{1}{500}$th part of an inch in breadth, composed of annular segments which overlap each other from before backwards; to these eight legs are articulated, and it is provided with a small head, furnished with mandibles, and which can be retracted into the rings composing the thorax of the animalcule; unlike the *acarus scabiei*, this insect appears to produce very little irritation, and must not be regarded as the cause of the disease, the slight pruritus it occasions, not being observable in every case of acne; nor am I aware that any treatment of practical importance has hitherto been deduced from a knowledge of its existence. I should mention that DR. SIMON'S researches have been confirmed by ERASMUS WILSON'S subsequent accurate microscopic observations, but that my own labours in this department have been rewarded by no such successful result.

The *acarus folliculorum* and its exuviæ, which it is said frequently to cast off, may be occasionally discovered in accumulations of sebaceous matter squeezed from the large follicles of the healthy skin, and the insect, which is a *rara avis*, for the loan of which I am indebted to Mr. Queckett, of the College of Surgeons, will be shown after the lecture to those gentlemen desiring it, by Mr. Topping, microscopical curator.

Willan and Bateman, in their descriptions of acne, divided the disease into three or four species, which were named A. simplex, A. punctata, A. indurata, and A. rosacea. I have not materially deviated from this mode of considering the complaint, which you will observe on the chart before you, consists of three species, one of which is not comprehended in Bateman's division already mentioned, viz: A. pustulosa.

Like most other cutaneous diseases, acne may be local or general, and it may appear in a scattered, confluent, or inveterate form. The face, the shoulders, the neck, and chest, are, however, the parts of the body most frequently affected; though I have seen the disease pretty generally scattered all over the body, excepting on the lower parts of the extremities and on the hands and feet.

The two first species of the disease A. simplex, and A. pustulosa, simple and pustular acne, (the acne simplex, punctata and indurata of Willan,) belong almost exclusively to youthful life from puberty, till the age of 25, and in a few rare instances to that of 30; the last written species on the chart, A. rosacea, rosaceous acne, may also appear in young subjects, but it is most commonly developed between the ages of 35 and 55; no rank or condition appears to be exempt from the eruption of these local disfigurements, which, for the most part are mere indications of local congestion, or disordered action of the capillary circulation, occasioned by a derivation of blood from the surface, to supply the greater exigencies of other parts, organs, and functions, that for the first time commence their important offices in the animal economy, thus proving what is often observed in other diseases, that any increased local action in the capillaries of a part, has a direct influence in modifying the action of these vessels in any other portion of the body, with which such part may be connected by sympathy or function. There is seldom any derangement of the health in acne as a consequence of the complaint; the strong and robust appearing nearly equally prone to it with the weak and delicate, though of course the malady will be somewhat modified by any constitutional disorder; this exemption from general diseases we must observe, however, does not apply to the last species on the chart, called A. rosacea, which in most instances is to be traced to some visceral derangement; or in females to a change in the circulation connected with uterine irritation, derangement, or disease. Observation would lead me to conclude that some yet unexplained connexion exists between the cutaneous circulation in the face, which of course influences the diseases of the part, and changes or disorders occurring in the generative system of both males and females; this connexion is conspicuous in some of the lower animals, in common poultry, for example, the crest of the cock or hen, evidencing in a remarkable degree, by its colour and vascularity, the activity or absence of incubation. This remark is further verified, by the well-known production of acne simplex, in its most inveterate forms, by the indulgence in certain vicious habits; but whether the morbid derangement is direct or indirect in such cases, or in those of acne rosacea, from uterine affections as before mentioned, may be considered doubtful, as dyspepsia or chronic visceral disorders, particularly those of the liver, are often found coexisting; and such affections alone, are very commonly to be regarded as the influencing origin of acnous complaints, yet it is surprising how often Leucorrhœa in the female is an attendant symptom of acne—showing its connexion with uterine disorders; whilst in both sexes, the age of puberty, a congenital tendency, the aforesaid morbid habit, an addiction to fermented liquors, (beer being especially obnoxious,) over feeding on highly spiced dishes and crude vegetables, are more usually to be traced as attendants, and probable causes of the complaint; indeed, the latter influencing circumstances have been long since appreciated; CHAUCER our oldest, and not least observing poet, in his "Faery Tale," thus describes "the Sumpnour," the convent caterer:

> " A Sumpnour was there, with us in that place,
> That had a fire-red *cherubinnes** face;
> For *saucefleme*† he was, with eyen narrow,
> * * * * *
> With *scallèd*‡ browes black, and *pilled*§ beard
> Of his visage children were sore afeard.
> There na's quicksilver, litarge, ne brimstone,
> Boras, ceruse, ne oil of tartar none,
> Ne ointème that woulde cleanse or bite,
> That him might helpen, of his *whelkes*‖ white,
> Ne of the knobbes sitting on his cheeks
> Well loved he garlic, onions, and leeks;
> And for to drink strong wine as red as blood.'

But in justice to those afflicted with this often misjudged disfigurement, I must beg you will observe, that the intemperate are not its only victims, for the water drinker is by no means exempt; indeed I have fancied cases of acne rosacea have multiplied since the introduction of teetotalism, and this to an extent that has occasioned my regarding that species of abstinence as one of the predisposing causes of the disease, arising, probably, from the disorder it induces in digestive organs deprived, perchance suddenly, of an accustomed stimulus.

It is very difficult, either by drawings or models, to obtain an accurate idea of the appearances of acne, as the enlarged pores of the skin and the unctuous state of the surface can be scarcely represented—a fact apparently appreciated by Alibert in his splendid delineations of cutaneous diseases, as he has given but one meagre representation of the disorder under the name of *Dartre-pustuleuse Disseminea*, and for the same reason I have but few models to offer to your notice, and must therefore trust to my powers of description to render you familiar with the characteristics of acne.

Acne Simplex is so constant an appearance, to a greater or less degree, in both sexes in their youthful days, that unless it be of unusual extent or severity, it scarcely ever claims the attention of medical men or requires medical treatment, though it is sufficiently annoying at that period of life from the disfigurement it occasions. It consists in an eruption, sometimes sudden in its appearance, of hard conical-shaped pimples, varying from the size of a grain of mustard-seed to that of the largest pea; these pimples, or *vari* as they are technically called, are a little elevated above the surrounding skin, from which, on their first advent they are scarcely distinguishable in colour, though they are sometimes lighter, and the skin then appears as if it were stretched over some hard minute bodies beneath it, which have interrupted the circulation in the points implicated; when the hand is passed over the part thus affected, a sensation as of small shot beneath the surface gives better evidence than the eye of the presence of the eruption; there is also very often, as I have before mentioned, an unctuous oily state of the skin, and considerable enlargement of the pores, which occasions the adherence of dust, and gives the patient a sallow dirty appearance, besides insinuating itself into the follicle, and discolouring the superficial layers of the inspissated secretions it contains, so that when those deposits are forced from their containing crypt through the narrow opening of the pore in the cuticle, they assume the appearance of a thread, worm, or grub, with a black head, or extremity; as the disease advances, the spots I have described, which are so many small accumulations of sebaceous secretions, in their proper duct, become more or less inflamed and surrounded with a zone of redness of greater or less intensity, whilst suppuration is set up in some of them, and runs its course very slowly; and when at last a yellow point appears on the surface, and a discharge takes place, the matter is imperfectly formed, and can only be evacuated by considerable pressure, being sometimes like cheese curd, at others of the consistence of soft wax, and mixed with blood, whilst a considerable swelling or tubercle remains behind, and becomes covered for a few days with a slight yellowish lymphatic crust, which ultimately falls off, and discovers a violet-coloured indelible cicatrix, that takes years for its entire obliteration; many of the vari, however, do not follow this process, but appear to be re-absorbed, and during the whole lengthened continuance of this youthful blossoming the acne may be observed in all the forms I have cited, viz., as hard points, inflamed pimples, suppurating vari, crusted tubercles, and indelible minute scars on those spots where the disease has gone through the healing processes. Some of these stages of the disease have furnished Willan and Bateman with two of their species, which I have comprehended under this single description of acne simplex: I allude to A. punctata and A. indurata; the former term being given to the eruption when it consists of mere points, and the latter to inveterate forms of the disease, where several vari become confluent, and produce a large indurated, violet-coloured swelling, which suppurates very slowly, and much disfigures the parties affected, who for the most part are more advanced in life than those who are commonly attacked with the other forms of acne simplex; no practical result arises from considering acne indurata as a separate species, as it is to be found intermixed with most severe instances of the disease I have described.

I have already enumerated the causes of acne; but I must mention that very often the complaint seems entirely local, and rather indicates a sanguine temperament and robust health than the contrary. In young men, the face about the beard and whiskers is most generally affected. In young women, perhaps, the shoulders and forehead: though the whole or greater part of the upper portions of the body, the face, neck, and chest, in both cases may be the seats of the complaint. That species of acne, which I have denominated A. pustulosa, is a much more rare affection than the last mentioned; nor am I aware that it has been separately described. It differs but little from acne simplex in appearance; yet a minute examination affords sufficient characteristics in my opinion to entitle it to a separate consideration. It is distinguished commonly by a somewhat sudden eruption of red

* *Cherubinous, round.* † *Red pimpled.* ‡ *Scurfy.* § *Bald, scanty.* ‖ *Festerings.*

pimp' vari, more inflamed than those of acne simple .. and which are not usually intermixed with much follicular enlargement and sebaceous secretion. A considerable degree of pruritus and burning or stinging pain attends this complaint, which also suppurates more speedily, and with a greater abundance of secretion. It also breaks and discharges spontaneously, and with a greater disposition to superficial ulceration or eczemation around the opening than is no : manifested in acne simplex. This disease forms the connecting link between impetigo, porrigo and acne. Indeed, did it ever end in incrustation or become squamous, it would be deservedly considered as belonging to that complaint; but this is not the case, the eruption pursues an exactly similar course to acne simplex—commencing at puberty and ending, unless appropriate remedies are applied, at the age of 22 or 23; it is, however, a more rebellious disorder, and in my hands has proved much less manageable, yet it seldom or never leaves scars, but discharges a watery serosity for some days or weeks, and itches a good deal, until at length it dries up, without leaving much induration; and a succession of the same pimples and processes at distant and different points continue to be witnessed, each pimple pursuing a separate and independent course. It is in this form of acne that I have seen the whole body affected, though the face is its chief seat; and I have no doubt the complaint was comprehended by Alibert, in the disease he has designated Dartre pustuleuse disseminea, though the description he has given of it is not quite coincident with what I have detailed.

Acne rosacea, or, as I should prefer to call it, A. erythematosa (as the inflammation is of the nature of erythema) belongs in an especial manner to a more advanced age than the two former species. The nose is the usual site on which its first development is witnessed, a few bright red spots, accompanied with more or less troublesome irritation, manifesting themselves about the age of 35 in individuals who have deranged their digestive functions, by the pleasures of the table, or indulgence in fermented potations, or in females from derangements in the menstrual process or the approach of their critical period; by degrees the spots or pimples alluded to, enlarge the skin around them, become swollen and of the intense redness that accompanies erythema—when pustules, which seldom attain the size of those attending other varieties of acne, make their appearance on these inflamed portions of the integument and they undergo a slow suppuration accompanied, with a red, and congested state of the parts around, arising chiefly from a visible enlargement of the capillaries, and especially of the veins which remain constantly tortuous and injected; as one pustule disappears, others succeed, and run through the same separate and independent course, until at length, the face becomes covered with tubercular and most unsightly red or purple indurations, the nose occasionally becoming enlarged and hypertrophied to a degree that would justify the application of the soubriquet *naso*, as applied to Ovid of old, as the organ may attain twice or thrice its natural proportions. Occasionally, however, acne rosacea, becomes confined to a small space, and does not extend in the manner described, whilst in other instances, the eyelids, the lips, the mouth and gums, and even the ears, and neck, become implicated in the disease, giving the unhappy patient an appearance at once hideous and disgusting, as suppurations, crusts, and fiery redness are the usual attendants of the hypertrophied distortions of his features; thus constituting the divisions inserted on the chart. These severe cases very rarely occur where no hereditary cause is existing. At the present time, I know a family in which nearly every member is more or less affected, and the father and grandfather, as they assure me, "kept their colour even in the coffin." I wish I could present you with a model of the nasal organ of one of these individuals, which is at least four times the natural size, and of so inflamed and fiery an aspect as to merit most of the racy satire with which Falstaff assailed that of his friend, "one Bardolph," described by Fluellin to Henry V. as an individual "whose face is all bubuckles, and whelks, and knobs, and flames of fire," and looking on his nose as in the case of the individual to whom I have alluded, you might, as Sir John has it, "think of Dives that died in purple; for there he is, *in his robes*, burning—burning." Henry IV. Sc. iii. I made an essay, with the proprietor of this curiosity, to suffer me to take a drawing or a model, but I was obliged to abandon the attempt, or give irremediable offence.

Acne Rosacea in the young subject, is a somewhat different disease from the foregoing, resembling in every particular, save that of greater redness and inflammation, acne simplex already described. Another variety of acne, which Biett has termed *acne sebacea*, is a form of circumscribed lepra, psoriasis, or erythema, affecting the nose for the most part, and, as I have mentioned, when considering leprous diseases, resisting every means with which I am acquainted for its removal, except the destruction of the part with caustic, or residence by the sea, or long perseverance in the internal and external use of cod liver oil. The disease to which I have here alluded is a reddish, scaly, insulated patch, mostly on the nose, seldom or never manifesting pustules or tubercles, the secretions being either of a lymphatic or squamous nature; in the latter case, the morbid state of the cuticle seems to extend into the sebaceous follicles, so that when a portion is detached, it exhibits numerous small points or processes on its under surface.

I have now endeavoured to render acne and its varieties so familiar to you, that I think it can scarcely be necessary to say more on the diagnosis, as the complaint has so many characteristic marks; the only other diseases with which it can be confounded, if ordinary attention be paid, are *porrigo* and *impetigo* of the face, which have been already reviewed; or its twin sister *sycosis*, a malady affecting the beard and other hairy parts of the body, which will claim our future consideration. However, the origin, progress and duration of acne, the absence of scales and incrustations in the complaint, and the presence of the peculiar secretion of the follicles, with the animalcule occasionally found therein, will not fail to distinguish it from every other cutaneous disorder having the face for its occasional seat. With regard to the complications of acne with syphilis, scrofula, cancer, &c., I propose taking advantage of some future occasion, to give this portion of the subject all the consideration it merits, and which, in connexion with modification of the maladies heretofore described, I can assure you, will lead me into details that may rather be comprehended in a distinct course of lectures, than in the limited space to which I have allotted the description and properties of the uncombined diseases of the skin.

I shall conclude the subject of acne next week; as, were I now to commence a description of the treatment of the disease, I must detain many gentlemen, who have honoured me with their attendance, from other and more important avocations.

ORIGINAL CONTRIBUTIONS.

CASE OF TALIPES, OR CLUB FOOT, IN THE ADULT, SUCCESSFULLY TREATED.

By A. W. Close, Esq., Grosvenor Street, Manchester.

The elements and the practice of the healing art in the present era of its history seem to be alike convulsed. The whole system, from the circumference to the centre, feels the shock. Even the thoughtful and considerate practitioner finds it difficult to remain unmoved; but let him try to do so—let him collect his thoughts, scattered may be by the turmoil and scepticism which prevail around him—let him watch and patiently wait the progress of events: ultimately the weal of science will be promoted, and the very efforts intended to mutilate and destroy, shall consolidate and establish. In the present passing period he may select much that is good from the discordant forces at work without. Hydropathy, though it actively kill many of its unfortunate patients by doing too much, will fix his attention on the value and importance of hygienic measures, and of water, as an external agent, whose use has been too much neglected in this country.

Homœopathy, though it passively permit many of its confiding but deluded victims to perish, by doing too little, will equally teach him to confide in hygiene; to give less physic in some cases, particularly in those of a nervous or chronic character; to trust more to the vis naturalis, not always, by the bye, the vis medicatrix; and whilst he wisely rejects the universality of any curative law yet promulgated, particularly one so puerile and insensate as the "similia similibus curantur" of the homœopathist, he will grant that the attempt to discover a general law operating on the cure of disease, as gravitation and its modifications on matter, is not unsupported both by philosophy and analogy. "The discovery of Delpech led to a mania, the squint mania, then the club foot mania, the curved spine straightening mania, then came the stammering cure mania." Nevertheless, the operation of Stromeyer for the cure of talipes, a total improvement upon that of Delpech, is a great boon to humanity. Like many other good things it is liable to abuse, but when judiciously applied, never fails to afford great relief and satisfaction to the patient, and high gratification to the operator. Byron's biographers say that much of his moroseness and misanthropy originated in the affliction of this deformity. I can well suppose that it was so, for the awkwardness of gait is not only disagreeable to the eye of an observer, a circumstance which would peculiarly affect the mind of the haughty and unfortunately misled poet, but the mode of progression necessarily adopted by the sufferer is sometimes exceedingly painful and laborious.

Towards the end of last April I was requested to visit a gentleman at Green heys, who wished to consult me respecting a deformity of his left foot. Mr. P———, aged 35, has not been able to place his heel upon the ground since he was five years old. When he stands upright, the heel is raised from 2½ to 3 inches above its natural position, and it can only be made to touch the floor when the body is thrown backwards, and the left foot and leg placed considerably in advance of the right; and then only by the posterior facet of the os calcis. From the oblique direction in which the weight of the trunk has been brought to bear upon the tarsal arch, the bones of the tarsus are made to bulge upwards and forwards. This gives the appearance of displacement or malformation, and induced a gentleman of more than ordinary anatomical knowledge, whom the patient consulted some years ago, to state that such actually existed. The concavity of the arch is much increased by the just mentioned convexity of the dorsum, and by a tight cord like band at its inner side, formed by the contracted tendon of the flexor longus pollicis, and also by a general contraction of the plantar aponeurosis, extending from the metatarsus to the os calcis. By these means, likewise, the foot is drawn very much inwards, and brought into a condition midway betwixt the "equinus" and "varus." The tendo achillis is felt hard and tense—the muscles of the calf are shrunken and attenuated. The patient feels that the great impediment to the placing the sole of the foot down is the firm and stretched tendon inserted into the heel—this, too, prevents the free extension of the knee. Progression is performed on the plantar surface of the anterior extremity of the metatarsal bone of the little toe, and frequently on its outer edge. To meet the elevation of the heel, and the inclination of the foot inwards, the patient has worn a boot some inches thicker at the heel and outer side than at the inner. The contour of the foot when covered by the boot is irregularly oval, and not unlike that of the cow or horse; a circumstance, I suppose, which has given it the somewhat euphonical designation, "equinus." Mr. P. states that the act of walking is always laborious and distressing, and from the difficulty of getting a boot to fit, and the presence of corns, often very painful. The muscles of the leg are nearly inactive, and the advance or retrogression of the affected extremity seems to be effected by the muscles of the thigh attached below the knee, and into the patella. In short, the limb below the knee acts rather as a dead weight, than a useful member.

I at once held out the prospect of considerable improvement from the operation. Mr. Walker, surgeon to the Eye Institution, and Dr. Henry Reid afterwards saw the case with me, and although not so sanguine as myself as to a favourable result, they both concurred in the propriety of the operation.

On the morning of the 8th of May, the patient being placed on the face, with the assistance of Dr. H. Reid, who bent the heel downwards, I divided the tendo achillis by passing a tenotomy knife immediately under the skin; turning its edge upon the tendon, and cutting towards the deeper placed textures; its division was accompanied by a grating sensation, but not by the snap which is frequently heard. The absence of this, Dr. Little, very correctly I think, considers to indicate that the gastrocnemii are, prior to the operation, contracted to the utmost extent. The tendon of the flexor longus pollicis, and tenser portion of the plantar fascia, were divided in like manner. I had intended to apply

the extending force immediately after the operation' but finding that the edges of the incision made in dividing the tendo achillis would, by so doing, be kept so much apart as to interfere with their union by the first intention, I bandaged the foot in its deformed position, and in the afternoon applied a splint to the outside of the leg more securely to keep it so.

May 13.—On the 11th the incision being pretty firmly agglutinated, the instrument, which consisted of Scarpa's boot with the screw and unyielding iron rod, most admirably manufactured by the Messrs. Wood, surgical instrument makers of this town, was applied—but the extension was not commenced till yesterday, when it was slightly exerted, and to day increased, and the patient ordered to get up and walk about occasionally.

June 20th.—On the 11th day after the operation, the foot and apparatus being covered by a gaiter, Mr. P. went to and from his place of business in a cab; this he has uninterruptedly continued to do. The extension has been gradually and carefully increased. To-day, on attempting to turn the screw, it is found to have reached its last turn; the foot-board is, at the most acute angle it is capable of—the heel is as much down, the ankle as much bent, as that of the other foot—and the foot has lost its tendency to turn inwards.

On the 20th, he put on a pair of lace-up boots, which he was requested to keep on during the day, the apparatus to be applied at night, and two hours exercise in it to be taken every morning. On the 27th, he walked from his place of worship to his house, a distance of half a mile; and six days after he walked from the warehouse in town to his own residence, a distance of a mile and a quarter. He is now endeavouring to improve the mobility of the joint, and to correct the imperfection of gait and the unsightly associated actions of the muscles of the trunk and extremities, which have been produced by the deformity so long continued. In this respect, his own intelligence, to which I am much indebted for the rapid success already obtained, and time, will develop great improvement.

The early history of the case I endeavoured to obtain from the medical gentleman who attended the patient in his infancy. From him I could only learn "that to the best of his recollection it was mere weakness of the ankle joint." From other sources I am informed that "he was very delicate in infancy; and up to the age of three or four years he had frequent attacks in the bowels, at times very severe. The deformity was first noticed when he was about four years old. Various methods were used either to check or remove it. When between six and seven years old, lightly constructed irons, fastened to the sole of the boot, and reaching a little way up the leg, were worn; these appeared to do no good, and being troublesome were left off; binders were also used, and frequent applications of cold water." The deformity appears to have reached its maximum at the age of fifteen, or sixteen. It seems then, according to the theory propounded by Dr. Little, with which I am disposed to coincide, both as to the origin of congenital and non-congenital talipes, that the irritation of the mucous membrane of the alimentary canal, implied by the term "weak bowels", had so affected the incident and reflex nerves of the spinal chord, as to produce spasmodic contraction of the muscles of the calf. "The disturbance may continue a considerable time unheeded, or without suspicion of its tendency to induce secondary disease being awakened. By means of the chain of filaments on which the reflex functions of the nervous system depend, it may be inobtrusively exciting involuntary contraction, evinced by a scarcely perceptible limp, a tendency to fall on a certain wayward action in walking. At this period it frequently happens that if the foot of the child be examined when not actually engaged in walking or standing, no anormal condition can be conceived." Not to enlarge upon this particular, I may observe that the early history of my patient fully bears out this reasoning. And that it is a case of talipes from spasm, and not from paralysis, is rendered obvious by the fact, that after the operation, he had the power to flex the ankle joint, which he did not possess before. This is increasing. A few additional observations shall conclude this communication.

It is important to take care that every contraction likely to offer an impediment to the restoration of the foot to its normal state be removed. This intention should be fulfilled by a sufficient division of the resisting textures: at the same time the operator should keep the eye of his mind fixed upon the important parts which may be injured by a careless procedure.

I was advised by some very good authorities at first to use Stromeyer's foot board, a plan which was uniformly adopted by Dr. Little in all his adult cases; but I conjectured that an arrangement by the intervention of which the heel could be brought in contact with the ground, and have, at the same time, the superincumbent weight of the body, would be more consonant with the natural relation of the parts, and therefore more likely to prove successful. The result proves that I was not mistaken. A more uninterrupted, expeditious, and perfect cure of the adult is not on record.

The proper choice and application of the instrumental part of the treatment—its daily adjustment—occasional removal and re-application—the avoidance of violent and irregular extension, and of excoriations—are of equal importance with the operation itself.

The almost intolerable pressure produced by the footboard on a corn at the sole of the foot, for which Dr. L. recommends an air cushion, was immediately and effectually relieved by the occasional application of the arg. nitrat.

At the outset I mentioned that this operation is sometimes abused and misused.

I have known cases of talipes operated upon, and then submitted to the aid of a rudely constructed wooden splint. No wonder they have failed.

The operation has been performed in hemiplegic cases, when there existed not the possibility of success; sloughing, and a far worse state of matters than were present previously to the operation, ensued.

It has been practised on persons of a bad constitution, *bon vivans*, wine bibbers, those who should have had a preparatory treatment of six months, under the care of Priessnitz—sloughing—delirium tremens, and death followed.

Chiefly as an instance which may prove partially corrective of such folly, I offer the case now related to the readers of the Medical Times and to the profession.

Much might be added to the mode of, and best instrument for performing the division, but the sources of information on these points are in every one's possession; besides, every case will require the practitioner's wn judgment, dexterity and ingenuity.

FATAL PERIOSTITIS FROM THE INCIDENTAL EXTERNAL USE OF CORROSIVE SUBLIMATE.

By Robert Annan, Esq., M.R.C.S.E.

In his elaborate and instructive chapter, *Of Poisoning with Mercury*, Professor Christison * has given numerous examples illustrative of mercurial action, immediate and remote, in the human body, not the least interesting of which are, the testimony of Dr. Guerard to the production of ptyalism from the use of the warm bath of corosive sublimate, 1 ounce to 40 quarts of water; the case of Dr. Anderson, where from the external application of the same remedy, dissolved in rum, 30 grains to the ounce, severe symptoms, with ptyalism, were induced; and a case by Professor Syme, in which a solution of nitrate of mercury, rubbed by mistake on the hip and thigh in place of camphorated oil, was followed by intense pain, shivering, general disorder, and ptyalism, and afterwards exfoliation of the lower jaw; and lastly, the case of the German, by Dr. Scheel, affected with salivation, evidently mercurial, which proved fatal, but which it was impossible to trace to its real cause till after death, when a little leathern bag containing a few drachms of mercury, was found hanging at his breast, and which during six years had been frequently renewed, having been used as a protection against itch and vermin.

As a sequel to these, and illustrative, though in a somewhat different shape, of the effects, immediate and remote, from the incidental external application of corrosive sublimate, the following outline of a case may not be unacceptable to my medical brethren.

In the end of January, 1845, G. F., 38, married, a shepherd from his youth, of a very fair sanguineous complexion, after being employed several hours daily, for a succession of days, in washing or rubbing sheep affected with cutaneous disease, with a nostrum afterwards ascertained to consist of two drachms of corrosive sublimate, with mur. ammon. in about 20 ounces of water, was seized with sickness, vomiting, and constitutional irritation, and after the lapse of several days with ptyalism, though not particularly severe, by which he was confined for nearly a fortnight. About six weeks afterwards a similar attack was experienced from the same cause, leaving behind a considerable degree of debility and emaciation. He then resumed his out-door occupation, the weather being remarkably mild for the season, though occasional frosts were succeeded by broken weather. On inquiry, I learned from my patient that he had repeatedly before had occasion to apply, with his own unprotected hands, the same remedy, without till now being conscious of any bad effects on his person. During the spring months and the beginning of summer, he suffered, as I was afterwards told, from wandering pains in his joints, which were formerly seated in the left, and afterwards also in the right ankle. In June, I accidentally saw him, and then found the inferior extremity of the fibula of the left leg, to the extent of about fc inches, somewhat red, and swollen into a pyrifo shape, though locomotion was only slightly impeded. Leeching, with blisters, and other means were recommended, though, from circumstances not necessary to be here stated, I afterwards found that the advice had not been followed. In July, after trying of his own accord the effects of cold and warm sea-bathing, he consulted, by my advice, an eminent surgeon in Edinburgh, and blistering, and the internal use of the sol. hydriod. potass. were continued for two months without benefit, when he again visited the metropolis, and was seen by his former adviser and another surgeon, but still with no beneficial results. At this period, in addition to a considerable increase of the swelling and pain in the fibula of the left leg, a slightly elastic tumour, of the size of an almond, had appeared on the forehead towards the centre of the *os frontis*, and about two inches above the right eye, preceded for several weeks by severe pains, described as shooting through the head from the brow to the occiput. And some time thereafter, the tumour being slightly moveable, an opening was felt in the skull, one-third of an inch in diameter, as afterwards more fully ascertained, on the removal of the tumour at the desire of the patient. The opening included both tables of the skull, and the edges were only slightly rough or irregular. Though, at first, the incision made partially united, it did not entirely close, and continued to discharge till death. The disease in both ankles increased, with severe shooting pains in both metacarpi. Partial suppuration took place over the extremities of the fibula and tibia of the left leg, which was opened without affording relief. His nights were now nearly sleepless; cataplasms and opiates, in various forms, were used without benefit; and after much suffering, death closed the scene in the beginning of April, or about 14 months from the period of the first attack.

It is not undeserving of notice that, of ten sheep to which the nostrum had been applied by this man at his last attack, two died shortly after its application, apparently from the use of this powerful solution.

It is, perhaps, the easiest solution of this case to infer, as there was not the slightest reason to suspect the presence of syphilis, that, as probably occurred in the case by Dr. Scheel, the system had been more than once previously, though slightly, affected, by the repeated contact of the solution, and operating on a strumous habit, had finally given rise to the train of symptoms above narrated.

July 18, 1846.

* Treatise of Po , Chap. xiv.

INFECTIOUSNESS OF SYPHILIS IN ITS SECONDARY FORMS.

By M. D.

In the course of a conversation upon medical subjects, which I lately had with an army surgeon of great experience, now settled, in civil practice, in a country town, he mentioned the particulars of the annexed cases as illustrative of the infectiousness of syphilis in its secondary forms.

The facts detailed appearing to me of vast importance in the pathology of syphilis, I advised him to publish them as a contribution towards settling rather a vexed question upon a subject often involving the peace of families, and always exceedingly embarrassing to medical attendants.

His engagements in practice, however, only afforded him time to read his memoranda to me; but agreeing with me that the cases were interesting and instructive, he has permitted me to send them to a medical journal for publication.

As the subject had been recently partially discussed in another journal, in some notice of a medico-legal case, tried at the last assizes in Cork, I intended to send these papers to that journal; but having learned since my arrival in town that the circulation of the MEDICAL TIMES far exceeds that of the journal alluded to, and wishing to give the widest publicity to cases involving so much, I send them to you, and earnestly hope that, notwithstanding the constantly crowded state of your columns with the most valuable matter I have ever found in a weekly periodical publication, you will soon find a place for this communication.

It was my intention to add some remarks upon these cases, and upon the infectiousness of syphilis in its secondary forms, generally; but seeing that your hands are so full, I confine myself for the present, to sending you the simple statement of facts—facts that may be relied upon; trusting that at some future period you will allow me to resume the subject in your pages, and make some comments for the consideration of the profession.

There is one remark, however, which I think it right to make upon the present occasion. It is this: that I believe the husband had originally a chancre in the urethra obscured by the more prominent symptoms of gonorrhœa, which no doubt engrossed the attention of both patient and surgeon. I entertain this opinion because, in the course of a very extensive experience in public and private practice, I have never known gonorrhœa, however virulent, to be followed by secondary syphilitic symptoms; and I believe that in every case where such a result is reported to have taken place, there was a true syphilitic chancre somewhere, and most probably in the urethra, where in complication with clap such sores easily escape the notice of the surgeon.

The most important question for consideration in the annexed cases, is, *as to the period of time at which the wife became infected, and the medium through which the infection was communicated to her.*

A bachelor in a respectable station of life, and in the enjoyment of good health, contracted gonorrhœa, to get cured of which he put himself under the care of a respectable general practitioner, in a country town. In about six weeks he was pronounced well; but three months subsequently he felt a soreness in his throat, and perceived some blotches on his skin. For this he consulted one of the surgeons to the County Hospital, and upon examination it was discovered that the throat was ulcerated, and the disease was considered to be syphilis in a secondary form. The patient was put under a course of the usual treatment (mercurial), under which he got well. Having continued perfectly well for five or six months, he got married in the month of September, 1842. In a little better than a year from the date of the marriage the wife lay in of a healthy child, which has never experienced any interruption of health, and is to this day perfectly well. The wife fell with child a second time, and when about seven months gone, her medical attendant was called in on account of a sore throat, which had resisted domestic remedies. Upon investigating the case with caution, the throat was found ulcerated, and the surgeon had, in his own mind, no doubt but that it was a case of secondary syphilis. From the information that the surgeon could collect, by the most delicate, but, at the same time, most efficient inquiry, he came to the conclusion that the patient had not a primary sore—besides which she was a person *strictly moral, and above all suspicion.*

Inquiry was then made into the husband's state of health when the details of the affection before marriage were learned; and it was further discovered that he was, then, labouring under an inflamed throat, with a sense of dryness and constriction in the fauces, and that there was also a papular eruption upon the chest and neck, invading posteriorly the scalp under the roots of the hair. The husband had never been guilty of any infidelity towards his wife, and was positive that he never had, even before his marriage, any ulcer or excoriation upon the penis, and having been so long well, and free from all symptoms, he could not suppose that he was labouring under secondary symptoms, and would not submit to treatment, trusting that the affection was merely temporary, and would vanish without medical aid. The wife, however, used the remedies prescribed for her, and remained under a mild course of treatment from the 26th of November to the 26th of December, with manifest advantage. On the 5th of January she was delivered of a male child, apparently healthy, and of the full time, or nearly so. On the third day the child was found covered all over with a papular purple eruption. A consultation was immediately had with one of the physicians to the County Hospital. The physician suspended his opinion as to the nature of the disease till he paid a second visit; but then he concurred in the surgeon's views, that it was a clear case of syphilis. The child died on the third day from the appearance of the eruptions. The mother's throat, which had been mending under the treatment before her accouchement, began to get worse soon after she left it off; and it was deemed advisable, about a month after her delivery, to put her under a mild course of mercury. A slight ptyalism was produced, and kept up for nearly two months, when a cure was effected. The husband finding that he was getting worse, and witnessing the good effects of the treatment upon his wife, submitted to a similar course of mercurial treatment, and was effectually cured. Up to this time there has been no re-appearance of the disease in any form; but the wife, who became pregnant again, lay in of a six months' still-born child, without any assignable cause for such an event. Her health, as well as that of her husband, continues good.

ON THE CEREBRAL CIRCULATION—THE COMPRESSIBILITY OF THE CEREBRAL STRUCTURE—AND THE BEARING OF THESE POINTS UPON SOME CIRCUMSTANCES IN DISEASES OF THESE PARTS.

By J. S. FLETCHER, Esq., M.R.C.S.

(Continued from page 313.)

I think I have brought forward experiments and cases where, in the natural state of the cranium, this cavity has contained both an excessive and a diminished quantity of blood over the natural standard, and which I believe show that the contents of the cranium are, like other organs, under the influence of the atmospheric pressure to a very considerable extent. Were it not so, the amount of blood or fluid, both in health and disease, within this cavity ought at all times to be the same.

Having shown, as I believe I have done, that the brain can be drained of its blood, there yet remains the question as to whether this deficiency of blood is replaced by an equivalent amount of serum, as is usually said to be the case; but I feel certain that it is not. It is certain, that as the brain with its normal quantity of blood pretty accurately fills the cranial cavity, and that although it is not so perfectly closed as to prevent the atmospheric pressure acting upon its contents, still it will not admit of the ready access of air to occupy the space of any fluid that may be removed. We must have this space occupied by some substance; and if the removal of the blood be very gradual, as in many cases of disease, no doubt some serum will be exuded which will partly occupy this space; but in few, if any, cases am I inclined to believe that this is filled up entirely by serum. There is another means by which it seems most probable that this space is occupied, and that is by the resiliency of the cerebral structure itself. This is, I believe, the way in which, in all cases of sudden losses of blood, the place of the blood is occupied; and this accords with the states found in the crania of those animals bled to death in the experiments of Dr. Kellie and Dr. G. Burrows, also, that in one of the cases of death from hemorrhage which I have previously narrated, for in none of these cases was there any serum found within the skull, although the blood was drained away; and from this I conclude, that in cases of very rapid death from hemorrhage the brain will be drained of its blood, and no serum will be found in its cavity, except in the normal quantity; also, that by bleeding we can remove blood from the brain without its being replaced by serum.

If there be more than the normal amount of serum in the brain, it is stated that there will be a corresponding diminution in the quantity of blood in the cavity, but this I am convinced, is not correct—in which statement I think I shall be borne out by detailing the appearances I found in a case of sudden death from serous apoplexy, where the brain contained more than its normal amount of blood and a very large quantity of serum. "The vessels of the scalp contained a considerable quantity of blood. Within the cranium, the sinuses contained about the normal quantity of blood; the vessels of dura mater were much injected, the meningeal arteries were quite full of a dark-coloured fluid blood, and blood oozed from several points on the external surface; the cerebral veins were excessively congested. At the base there was a very considerable amount of serous effusion; there was at least eight ounces. The ventricles contained some serum, and the cerebral structure contained more blood than natural."

In this case, death occurred very rapidly, probably within two minutes from the time of seizure. Again, it is stated that if there be an excess of arterial blood, there is a proportional diminution of the venous, and *vice versa*. This statement rests upon the previous opinions which most authors had formed with regard to the circulation, and is in my opinion equally incorrect. There no doubt may be an excess of either venous or arterial blood in the brain. The case of simple apoplexy previously narrated is an example of the former; this may occur at any time, but an excess of one is not necessarily attended with a diminution of the other, as both kinds may be in excess at one and the same time.

Another question worthy of inquiry into is, as to the effects of position upon the blood within the head. The supporters of the opinions which I have been combating contend that it is not influenced by position, but both experiments and facts point out the opposite of this. Dr. Kellie killed two dogs by Prussic acid, and suspended one by the ears, and the other by the heels, and allowed them to remain eighteen hours, and he thus describes the appearances. "In the one suspended by the heels, the integuments and external vessels were greatly congested; in the one suspended by the ears, these parts were pale and the vessels empty. Within the head the contrast was but trifling. The sinuses beyond all doubt were loaded in the one suspended by the heels, and rather empty in the other."

Dr. Burrows repeated these experiments on rabbits, and thus states the result: "In the one suspended by the ears was to be seen a most complete state of anemia of the internal as well as the external parts of the cranium; in the other, suspended by the heels, a most intense hyperemia, or congestion of the same parts, and these opposite conditions in the vascularity of the brain induced solely by position and the consequent gravitation of blood." After these experiments, there can be no doubt as to the effect of position. Indeed this is evidenced daily by facts which are constantly occurring in disease.

I will next state my reasons for believing the fourth statement, "That the substance of the brain is like every other organ compressible, and capable of undergoing changes in bulk, independent of the blood it contains." I confess that I have as yet been unable to find anything like satisfactory reasons why the contrary of this has been assumed. I would ask, what are we to understand by a substance being incompressible? In answering this, I should say that we are unable, by any force, to compress such a substance into a less space than it naturally occupies, and if this be correct, I think those who carefully examine the brain in health and disease, cannot suppose it to be such a substance. I can find nothing in the ultimate composition of this organ which should render it incompressible; we find it to be made up of a number of fibres, cells, and tubes containing a semifluid matter, and many of the fibres are somewhat elastic, and wherever there is elasticity there is generally compressibility. I could bring forward, did the limit of this

paper permit me, the details of numerous inspections, where I have seen many ounces of blood and serum effused within the cranium, and of depressed portions of bone, causing severe pressure upon the brain, forcing it into a less space than natural, (although the cranial substance has beyond the shadow of doubt contained its normal quantity of blood), and very frequently much more, and as a consequence suspending the performance of its functions. If it were an incompressible substance this could not occur. What do we observe to occur after a portion of bone has been removed by the trephine. Cases are detailed, were surgeons have made pressure upon the brain through the opening, where, after it has advanced to a certain extent, coma was the consequence. It has also been observed, that the brain has a pulsatory motion communicated to it by the blood, during the contraction of the heart, being forced into the cranium, and by its being obstructed in its return by the veins during expiration. This may be observed through the open fontanel of the child. During these acts the brain rises, and is pressed against the unyielding cranial walls, and again falls; this shows that it occupies a greater space at one time than another.

The appearances observed in hypertrophy of the brain, show it to be both compressible and elastic. I extract the following from Dr. Watson's Lectures, where these facts are accurately described; he says, "When in these cases the skull is sawn through, the upper loose portion of bone starts up as if moved by a spring, and the edges of the bone remain widely apart." Laennec also, in Corvisart's Journal states, that upon opening the bodies of persons whom he had thought affected with hydrocephalus, he had been surprised at finding a very small quantity only of fluid in the ventricles, while the convolutions on the surface of the brain were strangely flattened, proving that the central mass had undergone strong compression, which could only have arisen from its preternatural volume, and undue nutrition." Copland also speaks of the elasticity of the brain. How strikingly have we exhibited in these cases, both the compressibility and the elasticity of the central structure! Dr. Watson states, that the calvarium was lifted up as if by a spring, which spring, in truth, was the elasticity of the cerebral substance.

It appears to me, when reflecting upon these circumstances, that there can be little doubt as to this structure being in the fullest sense of the word compressible; also that there is in the normal state a certain amount of pressure exerted upon it, which is necessary to the performance of its normal functions, an increase or a diminition of which is productive of different forms of disease. This normal pressure appears to be communicated to it by the impulse of the blood sent to it during each contraction of the heart, and is altogether independent of that from the atmosphere. The cerebral structure being somewhat elastic, if this normal pressure be removed, there is a resiliency or expansion of it, which, if it go beyond a certain amount, is incompatible with the performance of its healthy functions; and this I believe to occur in cases of rapid abstraction of blood from the cranium, as a rapid bleeding. Here the heart's power being weakened, it ceases to propel the blood with the requisite amount of force, and the consequence is a diminution of the normal pressure on the brain, followed by resiliency of the cerebral substance and temporary suspension of its functions, which are readily restored by favouring the advance of blood to the brain, and thus restoring the pressure. This is the explanation I should offer of syncope and similar ailments.

Having now very briefly endeavoured to show from facts and experiments that the four statements with which I started are correct, I will very cursorily glance at the bearing of these upon some points connected with the diseases of these parts.

Even those authors whose views I have been combating have been constantly in the habit of speaking of an increased and diminished quantity of blood in the brain; and I think that after the cases which I have detailed there can be little, if any, doubt that either of these two conditions may occur, and that most circumstances which favour the determination of blood to other internal organs will have a similar effect upon the brain. It is highly important to be fully aware of the fact that we may have an increased quantity of blood or fluid in the cranium at any time, because owing to the brain being inclosed in an unyielding bony case, there is not the same allowance for the expansion of this organ as in the other viscera, by which the effects of this pressure might be obviated, and, therefore, the cerebral structure is compressed, and fatal consequences may be the result. This excessive quantity of blood may be either of a venous, or an arterial character, or it may be both, and may occur without the slightest rupture of vessel, being in such quantity as to suspend (through pressure combined with the effect of venous blood on the brain, although I think the effects of this latter cause have been greatly exaggerated) the functions of the brain, causing rapid death. This occurred in some of the cases which I have detailed. It appears, also, very evident that we may have the different states of active and passive congestion of this organ, which are well known to occur in most of the other viscera, and it appears to me that many anomalous cerebral symptoms, may be dependent upon one of these forms of congestion. These symptoms often very closely simulate those of inflammation of those parts, and when we remember how closely active congestion of the other viscera also simulates the symptoms of inflammation in the same parts, this appears the more clear. Active congestion of the meninges of the brain is often found in those cases of delirium tremens which terminate fatally, the pia mater being minutely injected with bright red blood, without any of the products of inflammation. Similar appearances I have seen in some cases where, after severe concussion of the brain, symptoms verging on compression appeared, and terminated fatally in a few hours; the only morbid appearance being the minute injection of the vessels with bright red blood. Abercrombie describes a number of cases where, after death, he found similar appearances; and these cases, he stated, are attended with peculiar symptoms, which he describes very graphically. There are many cases of what are called hysterical affections of the brain, where the symptoms so closely resemble those of inflammation that it is impossible to say whether inflammation exists or not. I have myself seen such cases, and have seen very talented physicians unable to determine the point. Now I believe these cases to depend upon congestion of the brain or its meninges. It appears to me very probable that in many of those derangements of the nervous system, which appear in hysteria, chorea, and other similar ailments, there must be in many cases some derangement in the circulation through the part, which at times borders very closely on inflammation: and this I should apply equally to the brain. To go into the symptoms which will arise from these different states of the circulation would require much more space than the limits of this paper allow. If the brain be liable, as I believe it is, to become congested from the influence of similar causes to those causing congestion of the other viscera, we are enabled thus to explain the occurrence of cerebral symptoms in various states which otherwise appear obscure; such, for instance, as the fatal coma produced by intense cold, noticed by Dr. Solander and others; here we have the blood driven from the surface, and the internal viscera considerably congested, in which the brain participates. It is to a similar cause, I believe, that the greater prevalence of apoplexy in old people, during very cold weather, is owing; for it is stated by Dr. Heberden, that "the number of deaths by palsies and apoplexy in this country is always greatest in winter," the cerebral diseases of the aged being one of the most prolific sources of their death in winter.

It has been shown that the brain may be drained of its blood, almost to any extent, by general bleeding; an anemic condition of this organ is not an unfrequent occurrence, and gives rise to various anomalous symptoms, dependent, I believe, upon two causes; first, upon diminished pressure upon it, by which its structure is allowed to expand, in consequence of its own elasticity. This explanation of diminished pressure will apply more particularly to syncope, dependent upon violent mental emotion or other similar causes, where, through the medium of the nervous system, the action of the heart is suspended for a time, and the impulse communicated from it to the blood in the cranium ceases, and therefore the pressure is diminished. The second cause is, that the brain, requiring a certain amount of arterial blood, in order that it may be enabled to continue in the performance of its normal functions, ceases to do so whenever that supply is not afforded, or does so but imperfectly. The circulation of venous blood, or its collection in the brain in passive congestion, gives rise to a particular set of symptoms, characterised by lethargy, and an approach to coma, but I do not believe that it is capable of giving rise to any rapidly fatal disease; but when combined with pressure to a considerable extent, very rapid death is the result, as in the case of simple apoplexy detailed by Dr. Francis. If the pressure be increased beyond a certain amount, as this organ is compressible, its functions will be suspended; and an increase of pressure may result from the blood being sent by the heart with so much force, or in such quantity, to the cranial cavity as to compress it; but it appears to me, whatever be the propulsive force of the heart, however greatly it may be increased, that it cannot compress the brain unless there be an increased quantity of blood within the skull at the time, or unless there be some other fluid, as serum, or any other substance encroaching more than usually upon this cavity. Thus we have explained the frequent association of hypertrophy of the left ventricle with attacks of apoplexy; also the frequent mistakes which have arisen in diagnosis, where heart affections have been mistaken for threatening apoplexy, to symptoms of which they may give rise. This increase of pressure is partly obviated or guarded against, by the tortuous course of the carotid arteries, thus checking the force of the blood; also by the cerebro-spinal fluid in some measure, for if there be much of this serum in the cranium at the time the increase of blood is sent it will first displace a portion of this, forcing it into the spinal canal; but the impulse containing it will next compress the brain.

This varying amount of pressure is used by Dr. Burrows, very correctly, as an explanation of the periodical attacks of some organic cerebral diseases, as epilepsy, the attacks being produced frequently by some circumstance causing an increase in the heart's action, and therefore in the vascularity and pressure on the cerebral substance.

From these statements it appears evident, that in cerebral diseases where there are symptoms of an increased quantity of blood in the brain, we shall give relief by all remedies likely to diminish the force of the heart's action, and by bleeding we can undoubtedly draw blood directly from the brain.

Hernia cerebri affords a striking example of the elasticity of the cerebral structure.

The subjects which I have been considering are very important, and will admit of a much more extended inquiry than the limits of a short paper like the present will allow of.

A PRIZE ESSAY ON PURULENT ABSORPTION.

Communicated to the Medical Times

By THOMAS OTTREY RAYNER, M.D., F.S.A.

(Continued from p. 109.)

The experiments I have detailed are imperfect; because, in the first, the matter injected was not nearly of the same consistence as pus; in the second, the dog survived too short a time to allow any marked effects to develope themselves: nevertheless, their results, together with the other considerations I have mentioned, justify the conclusion that the irritation produced in pus if merely mechanical, is, at least, of a very violent kind; and a strong opinion that in many cases, pus in, contact with living tissues, excites inflammation, having a specific tendency to terminate in the effusion of more pus. The question in its various bearings is one of great interest, and deserves special investigation, of which I hope one day to make it the subject.

We have seen, from the cases and experiments which I have cited in different parts of this essay, that conse-

cutive abscesses show a marked preference for certain organs and textures, viz., the lungs, the liver, and the joints, and afterwards in order of frequency for the spleen and the muscles. How are these facts to be explained?

When we consider that all the blood of the system, and consequently, all matters mingled with that blood, must necessarily in each round of the circulation, pass through the lungs; that a very large proportion of the blood passes equally often through the liver, and, moreover, that from the peculiar manner in which this organ receives its blood, and from the size and multitude of its capillaries, the circulation through it is very slow, the solution of the question, as far as it regards these two organs, becomes obvious. The experiments of Cruveilhier of injecting mercury into the vein, confirm this view here indicated; for, when thrown into the general venous system, the greater part of it was always found scattered through the lungs; but when into the portal system by means of a knuckle of intestine drawn through an incision in the abdomen, it was found equally disseminated through the substance of the liver. It is no objection to the inference deducible from these facts, that the pus supplied by phlebitis of a vein that empties itself into the general system, and is therefore carried first to the lungs, frequently causes abscesses of the liver also, because Cruveilhier found that, in some of his experiments, many of the mercurial globules were carried *through* the lungs, and were afterwards arrested at different points of their passage through the general system. An observation made by Andral (Essai d'Hem. Path.) also bears upon this point; in a case of disseminated abscesses follow ing a large psoas abscess, he found upon examination with the microscope, that the blood of both ventricles of the heart contained pus globules; but that they were much more numerous in the right ventricles than in the left.

It has also been found, by examination of numerous cases in which phlebitis of some of the veins of the portal system has been the cause of death, that abscesses in the liver were the only consecutive lesions produced. A case of this kind is reported by Cruveilhier, in which such abscesses followed violent and repeated efforts to reduce a prolapsus ani; and another has lately been mentioned to me by Mr. Partridge, in which they were caused by the operation for fistula in ano. The lungs and liver therefore appear to act as filters, retaining a large number of the pus globules during their passage through them. The liver appears to accomplish this more completely than the lung, on account, probably, of the less force of the circulation through it, and the complicated nature of its capillary network. That in consequence of the large quantity of blood which passes through them, more pus corpuscles are arrested in these than in any other organs; the necessary result of which is, that they become the most frequent seats of consecutive abscesses. But joints, the spleen, and the muscles suffer in the next degree of frequency. Can we account for this? A knowledge of the anatomical peculiarities of these organs will I think furnish the explanation.

The recent researches of Mr. Toynbee, on non-vascular animal tissues, tend to prove that these tissues, the chief of which is cartilage, are nourished by the exudation of the nutrient liquor sanguinis from the vessels in their vicinity, which in consequence, the venous capillaries especially, are very numerous and large; those of the bone in immediate contact with the articular lamella, form dilatations capable of holding a large quantity of blood, which therefore circulates very slowly through them; those of the synovial membrane, and the areolar tissue in its vicinity, serve the same purpose, and accordingly exhibit similar peculiarities. It is evident from this statement, that if the views concerning the primary seat of the inflammation caused by pus, expressed in a former part of this paper, be correct, that these large sinuses, from the slowness of the circulation through them and the consequent accumulation of the pus corpuscles within them, must be very liable to become inflamed. The bones forming a suppurated joint must also in most cases be purulent in their interior; but I have never met with a case in which this point has been examined into. Such an examination would be very interesting; and should the result I anticipate be established, it would afford a strong confirmation. It is no valid objection to this view that the eye does not often become the seat of an abscess consecutive to ordinary phlebitis, because, though the vessels which nourish the extra vascular tissues of this organ are numerous, and some of them large, they do not exhibit the remarkable ampullæ formed by the veins which supply cartilage. In puerperal fever, a disease very analogous to phlebitis, which indeed constitutes the principal lesion in many of its forms, the eye-balls very frequently suppurate. We may account for the frequency of consecutive abscess in the substance of muscles in a similar manner; the vessels supplying it are very numerous, and two large veins accompany each artery to within one or two gradations of the capillaries themselves. The great vascularity of the spleen indicates the reason why it so often becomes affected.

But can we account in any way for the concentration of the inflammation in patches, so that circumscribed abscesses always result? The question is a very difficult one; the following, however, appears to me a probable answer.

Pus mingled with the circulating blood, must, when carried to the lungs, be diffused pretty equally throughout those organs; but, nevertheless, it is easy to conceive that a greater number of corpuscles may be carried to one or two capillary veins together, than to others; and consequently the disturbance of the circulation in them would be more complete than in their neighbours.

According to recent observers the first stage of inflammation consists in enlargement of the vessels in which it takes place, and consequent slower motion of the blood within them; just as we see in a mountain river, which at one part contracts itself into a rapid stream, at another deepens and widens into a pool, in which the current is very slow. The blood circulating therefore more slowly in such vessels, the pus globules would accumulate in them more and more at each round of the circulation, and inflammation would be thus determined in such spots, while the rapidity of the circulation through the surrounding vessels would be increased, and the chance of pus corpuscles being arrested in their diminished suppuration in one joint rather than another in different cases, must be determined by similar accidental circumstances.

I am quite unable at present to account for the lower lobes of the lungs being always more extensively affected than the upper ones, or for the preference which disseminated abscesses exhibit for the surface of these organs. A similar preference for the surface being shown in the liver, also, indicates that it depends principally on some peculiarity in the mechanism of the circulation. In the early part of this essay, I endeavoured to prove that in all the cases in which disseminated abscess following a primary lesion either was actually found to be, or else from its nature and situation was very likely to be, complicated with purulent phlebitis. It would appear from this, that phlebitis is the only disease in which infection of the blood by pus in quantities sufficient to cause consecutive abscesses, takes place. Some pathologists, however, have recorded the opinion that pus globules exist in the blood in a number of diseases. Mr. Gulliver, for instance, in a paper published in the *Philosophical Magazine*, Sept. 1838, announced that he had discovered with the microscope, pus globules in considerable numbers, in the blood of patients labouring under erysipelas, small pox, consumption, hectic from chronic abscesses, &c.; Mr. Lane, in a letter to the *Medical Gazette*, shortly afterwards, confirmed this statement; and I find that Andral, in his recent *Essai d'Hem. Path*, also says that he has seen pus globules in the blood in similar diseases, marked by characters so decided as to admit of no doubt about their nature. Now, these statements would, if true, go far to invalidate the theory which it has been my object in this essay to establish, because we do not find disseminated abscesses common in such diseases. I believe them, however, to be erroneous, for the following reasons:—

1. Because, in all inflammatory states of the system the lymph, or colourless corpuscles of the blood, have been found to increase greatly in number, and to become larger than those observed in the healthy state; in this condition they have so much the appearance of pus corpuscles, that it is almost impossible to distinguish one from the other. With the kind assistance of Mr. Bowman, I have examined under his microscope various specimens of blood, taken from patients suffering from several of the diseases mentioned by Mr. Gulliver. The following are a few of the results.—

1. Blood taken from the right ventricle of a dog, which had died from the injection of pus into the veins. Examination 18 hours p.m. Lymph globules very abundant.

2. Blood taken after death from the arm of a man who had died of sweeps cancer. Many lymph globules, with small granules, like those found in pus.

3. Blood from a vein in the back of a patient, with vomicæ in the lungs. Lymph globules more abundant than natural.

4. Blood from child with lumbar abscess. Rather more lymph globules than healthy blood.

5. Blood from an erysipelatous foot. The same result. The lymph globules observed in many such instances presented no characters sufficient to distinguish them with precision from the pus corpuscles contained in the blood in the first instance mentioned.

2. The recent researches of Mr. Addison, and more especially those of Professor Gerber, tend to show, that reparation is effected by means of these lymph or exudation corpuscles, which are thrown out upon an injured surface, and become organised in the form of the particular tissue to be repaired; that when inflammation was high, these are produced in too great abundance, that the supernumerary ones apparently die, and are thrown off from the inflamed surface in the form of pus corpuscles; that this result never takes place in an internal organ till inflammation has gone so far as to produce disorganisation, and that it is no more possible for pus produced in such situations to get into the circulation, than it is for pus thrown out upon an external surface to find its way unaltered into the blood.

I conclude, therefore, that the corpuscles seen by Gulliver, Lane, and Andral, were lymph corpuscles, and that pus in quantities sufficient to cause disseminated abscesses never enters the circulation, except in cases complicated by phlebitis.

It is no objection to this conclusion that disseminated abscesses have been found, without any phlebitis being detected. 1. Because the examination is incomplete, and therefore invalid, unless all the large veins, as well as the interior of the bones, are inspected. 2. Because the local appearances of a phlebitis, the pus from which has caused disseminated abscesses may disappear before the death of the patient from the latter lesion.

By some it has been objected to the theory I have endeavoured to sustain, that we every day see large abscesses disappear by absorption of the pus they contain into the general system, yet no disseminated deposits follow; but the objection betrays ignorance of the known laws of physiology, which point out the possibility of the absorption of substances in solution only; indeed it is absurd to suppose that a solid body like the pus corpuscle can pass unaltered through the equally solid walls of the absorbent vessel. That pus is often absorbed, is true; but before it can be so, the pus corpuscles must undergo some change, probably solution, after which it is taken up, and then excreted by the proper emunctories. Sometimes it is left behind in the form of cheesy matter.

Suppuration in the lymphatics seldom or never gives rise to consecutive abscesses, because the matter is arrested in the lymphatic glands to which it is necessarily first consigned; these appear to act as filters to the pus, and to prevent the solid parts of it from passing into the circulation.

The question has been suggested, Are any others of the products of inflammation, besides pus, capable of causing consecutive abscesses? The only experiment that I am aware of, bearing upon this point, is one performed by Majendie, who caused consecutive abscesses in the joints of a dog, by injecting into its veins ten ounces of the serum of the blood of another dog. It would seem, therefore, that serum and flakes of lymph probably, if carried into the circulation in large quantities, may cause such disturbance in the capillaries as to terminate in suppuration. But considering the readiness with which effused serum is absorbed, the large quantity necessary to produce the effect, and the fact that when a sufficient examination has been made, pus has almost always been found the exciting cause in the human subject, I imagine that the production of abscesses by any other means, must, in nature, be very rare.

(To be continued.)

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS I'ANSON, of St. George's Hospital.

SURGICAL CASES.

CASE V.

Case of Fracture of the Base of the Skull.

John Smith, aged twenty-five, bricklayer, admitted by Mr. Cutler, 1844, Dec. 30, 10 A.M. Pulse small, weak, and laboured; action of heart feeble; trunk covered with a cold, clammy perspiration; extremities cold; breathing stertorous; features collapsed; pupils dilated, but capable of contraction on the application of light. There was complete insensibility to external impressions, with the exception of the above symptom. Blood oozed rather freely from the left ear and nostril. He had also sustained a lacerated wound over the right frontal protuberance; slightly denuding the bone.

His companions state that he had just fallen a distance of nearly sixty feet, from a scaffold to the ground; that when picked up he was found to be insensible, and was immediately brought to the hospital.

Warmth was applied to the epigastrium and extremities; and his head and chest were slightly elevated.

11 A.M. There is now considerable ecchymosis of both eyelids, with strabismus of the right eye and protrusion of the left, under the conjunctiva of which a considerable quantity of blood is effused. He still continues insensible, with stertorous breathing; has been sick several times; pulse 82, and of good volume.

Mitte Sanguinis ad ℥ix.

1 P.M. Has been again sick, and is now able to answer in monosyllables when spoken to in a loud tone; pulse 120, soft, and of less volume.

Calomel, gr. v., statim sum.

3 P.M. He remains in a drowsy condition, but will speak on being questioned; pulse 124, soft, and compressible; strabismus of the right eye not so great; bleeding from the ear still going on.

5 P.M. Strabismus disappearing; bleeding from the ear less; breathing more natural; still continues drowsy; pulse 108, fuller and harder.

M. S. ad ℥viij.

31st. During the night there has been very little stertor; the breathing is now quite natural, and the pulse soft and compressible; has several times vomited bilious matter. He appears more conscious; moans frequently, and lifts his hand to his head; he will also put out his tongue when requested; strabismus is now quite gone; bowels have not been acted upon.

Head to be shaved, and cold lotion applied. Haust. Sennæ, ℥iss. statim.

Jan. 1, 1845. Has slept several times during the night; bowels have been well opened; slight oozing from the ear still continuing. He is now quite sensible, and complains of severe pain on the left side of the head; pulse 88, rather hard.

Calomel, gr. ij. Opii. gr. ¼ 4 ta quâque horâ. Fever diet.

2. Has passed a good night; appears cheerful this morning; bowels open; tongue furred, but moist; pulse 90, softer than yesterday; still complains of great pain on the left side of the head; healthy suppuration is established in the wound on the forehead. Perst. in remed.

3. Pain in head much better; pulse 84, easily compressible; scalp cool; bowels open; no thirst; has an appetite; Perst. in rem.; beef tea one pint.

4. During the night he has been much troubled with diarrhœa, which was stopped by a rhubarb and laudanum draught; and the administration of the calomel has been discontinued.

The gums are now beginning to be affected, and the pain on the left side of the head is much better. He complains, however, of more pain in the wound, which is not looking quite so healthy.

6. Wound looking more healthy; no tenderness around it; bowels rather confined; pain in the head rather worse; pulse 84, harder than usual, but it is ascertained that he has been taking too much food. Haust. sennæ ℥iss. statim.

8. Pulse 72, soft; pain in head diminishing; tongue moist; bowels open; wound looking more healthy; appetite good. Broth diet.

10. Pulse 70, fuller, but not at all jerking; wound healthy; feels stronger.

13. A little serous discharge is now appearing at the left ear; pain in head no worse; tongue moist; bowels open; wound granulating, appetite good.

15. Says that last night when observing the flame of a candle, it appeared double to him when he looked at it with both eyes at the same time; but when he closed one eye, he could see distinctly with the other.

20. Continues to improve in strength, but still complains of his head, which he says has not an acute pain, but a confused aching, as if something were pressing it. To get up for an hour daily.

25. The pain in the head does not leave him, but his skin is quite cool, and pulse natural. Sp. Ammon. C. ʒ ss. Tinct. Calumb. ʒ j. Mist. Camph. ℥iss. bis die. Half ordinary diet.

28. Pain in head much relieved. Perst.

30. Pulse quick; tongue foul; bowels confined; pain in head worse. Calomel gr. iij. statim. Haust. Sennæ ℥iss. postea.

Feb. 1. Has now very little pain in the head; feels himself much stronger. Ordinary diet.

6. Continues improving. He has found that the skin of the left cheek has not so much feeling in it as before the accident; and he has in a great measure lost the power of using the muscles of that side of the face.

8. Has left the hospital convalescent.

REMARKS.

This is a case of supposed fracture of the basis of the skull. Recoveries from them, as Sir B. Brodie remarks (Med. Chir. Trans. vol. xiv., p. 326) are comparatively rare, not because the fracture is in itself more dangerous than fracture elsewhere, but because it is generally complicated with extensive injury to other and more important parts. It is rather a curious circumstance, that there was in the hospital at the same time another case under Mr. Keate, in which all the symptoms of this injury were present; but the patient was sufficiently well to leave the hospital in a few weeks.

We could get no distinct history as to the manner in which our patient fell to the ground; certainly he could not have fallen on his head, for the force acquired in such a descent would have been sufficient to have crushed the cranium; he might have fallen on a plank in his way down, or he might have alighted on his feet, or trunk, which being thus suddenly rendered motionless, while the head was still in projectile motion, the whole force of the fall was immediately communicated up the spinal column to the cranium, the base of which being the weakest and most irregular part of that cavity, gave way accordingly.

The first effect of the injury was insensibility, from the violence of the shock to the brain. Indeed, fractures of the base of the skull may be sometimes suddenly fatal—without the occurrence of extravasation—from the commotion in the medulla oblongata occasioning disturbance to the respiratory functions.

It is difficult to understand many of the effects of injuries to the brain. Some cases may be so severe as to occasion instant death, and on examining the brain no appreciable lesion can be discovered. In others there is good evidence that the brain has been penetrated, yet very slight symptoms have followed. But no doubt lesions often exist which we cannot discover; for as we cannot trace the delicate ultimate structure of the brain, it is evident that the same may be altered without our detecting it. Again, parts of the upper and anterior portions of the brain are frequently injured without serious mischief following, when the slightest injury to its base, or its posterior lobes, is often quickly fatal.

In the present case it was difficult to distinguish between the symptoms of concussion and those of compression. Probably, at first, it was pure concussion, but compression must have taken place very soon after. He was insensible immediately on receiving the shock, which generally happens in concussion; in compression this generally, but not always, comes on after some time has elapsed; had there been an intermission of the insensibility, the first part would have been set down to concussion, the second to compression. Sickness is generally attendant on concussion; it is a favourable symptom, showing that the nervous system is being restored. The pupils were sensible to the stimulus of a strong light; in compression, the pupils are insensible; but much dependence cannot be placed on the state of the pupils, as sometimes one may contract, the other dilate; or both may contract on the application of light. Stertor is generally an attendant on compression; but I presume that in this case, as in many others, the symptoms were so blended that it was impossible to draw the line of demarcation between them.

We must not suppose that the pressure was caused by bone, as there is seldom displacement of it in this kind of fracture, but rather to blood extravasated from some ruptured vessel. Of course, it is only conjecture as to what part was fractured, but the most usual course of the disunion is across the petrous portion of the temporal bone; thus causing rupture of the lateral sinus, part of the blood from which would escape by the external ear, and part would remain at the base of the brain, giving rise to the symptoms of compression. Perhaps there was also fracture of the floor of the orbit, causing rupture of some of its vessels; the blood from which becoming effused produced the protrusion of the left eye; or it might, perhaps, have been caused by some of the blood from the lateral sinus making its way into the orbit. There must have been pressure on the abducens nerve, supplying the external rectus muscle of the eye, so as to cause the strabismus.

The bloody chemosis also must have been caused by rupture of the conjunctival vessels.

The pain in the head, of which he complained so long, I attribute principally to the clot of blood, which of course required time for its absorption, and as it got less the pain also diminished; but no doubt, in the first instance, it was greatly increased by the concussion.

The serous discharge which appeared at the ear some days after the first symptoms had ceased, is almost constantly observed after fracture of the base of the skull, and is generally supposed to come from the arachnoid membrane.

With respect to the numbness in the cheek; there was probably some pressure of blood on the cutaneous branches of the superior maxillary nerve; and perhaps also some of the branches of the portio dura were injured.

The diagnosis of these cases is necessarily uncertain; but when bleeding from the nose, mouth, or ear follows an injury of the head, and has not been occasioned by a direct blow on those parts; or when ecchymosis takes place in the eyebrow after such an accident, though the part itself has not been immediately struck, these are important considerations, corroborating the suspicion of there being fracture of the base of the skull, implicating the petrous portion of the temporal bone, or roof of the orbit.

The *treatment* consisted, in the first place, not in bleeding, or giving internal stimulants, as in the vulgar opinion, for the first would have destroyed the feeble action of the heart, and the second would have rendered the liability to inflammation greater; but of warmth applied to the epigastrium and extremities; this equalises the circulation without producing congestion of any organ, and unless the collapse be very great, we need never be in a hurry to arouse the patient from it; indeed the premature occurrence of reaction may prove very calamitous, by favouring the effusion of blood. His head was slightly elevated, so as to retard the too violent influx of blood, as the collapse went off, and thus prevent the effusion of blood, or coagulation around the vessel of that already effused.

Bleeding is generally necessary to control the reaction, and prevent subsequent inflammation; perhaps in one case one small bleeding may be sufficient, while in another 250 ounces may have be withdrawn. In our present patient blood was drawn as soon as the pulse became full, and repeated when it again increased in volume. In fact, the tone of the pulse, and not so much its frequency, is the criterion by which we must be guided. A calomel purge was also given, both to clear out the bowels and produce a further lowering effect. Calomel in large doses was then prescribed, and continued until its effects on the system were perceived: next to venesection, this is certainly the most efficient means of preventing, or stopping inflammation. A rigorous diet was enjoined, and was in fact very necessary, as a very slight deviation from it soon caused an increase of hardness in the pulse. As the symptoms of increased action left him, a more nourishing diet was cautiously allowed; and after some time a little tonic medicine to help to dispel the pain in his head, which appeared to linger from want of nervous energy.

There is danger of inflammation, either after the effects of concussion have wholly ceased, or it may appear gradually as they are going off. The patient will appear languid, more restless than usual, thirsty; then the pulse will be quick, and perhaps corded; the skin dry and hot; the eyes suffused; pain in the head, as if a tight band encircled it; face flushed. If the surface of the brain have been injured, the mental functions may be but moderately impaired; but if the deep structures have suffered, the mental powers may be more violently excited; there will be furious delirium; pu-

pils very much contracted ; pulse 120, and hard. As it goes off there will be stupor, and the pupils will become dilated. If pus forms, there may be rigors, perspirations, twitching of the muscles, perhaps twisting the neck to one side ; a sense of weight in the head, yellowness of the skin ; then paralysis and stupor may come on.

Desault has divided inflammation into two kinds — phlegmonous and bilious — depending greatly on the constitution and habits of the patient, and the seat of the injury. The first kind is acute, and happens when the substance of the brain is affected. There is with it great vascular excitement and high delirium. In the second, the meninges are the seat of the disorder ; there may be low muttering delirium ; the vascular excitement will be less, and there will appear to be more gastric derangement.

Inflammation may come on at any time after the receipt of the injury—from four hours to three weeks, but most frequently between the eighth and twelfth days ; but if the collapse have been long, the longer time will have to elapse before the patient has passed the danger of inflammation.

When there is furious delirium and quickened circulation, we must bleed largely, and then rapidly introduce calomel into the system. Sometimes, also, cold affusion on the head will instantly check the delirium. In the meningeal form, we must rely on calomel, and not bleed. When stupor comes on, as it is mostly from congestion in the veins, a blister to the nape of the neck, or volatile liniment to the scalp, may be useful.

Fracture is sometimes followed by hydrocephalus, especially in children. Here the inflammation must be of a different kind from that which forms lymph or pus. We may apply leeches and blisters, and give mercury.

Concussion may give rise to chronic disease, such as thickening of the membranes, or scrofulous or malignant tumours, perhaps arising from a particular kind of excitement of the capillaries of the brain ; it may show itself weeks, or even years, after the accident. There will be partial paralysis of one or other organ, with irritability, and perhaps convulsions ; but these will disappear and recur at intervals. The only treatment we can employ is to repress the circulation by moderation in diet, &c., without lowering, and also occasionally by counter-irritation.

Sometimes we may suspect inflammation when there is in fact a state of anæmia, or a deficiency in the circulation through the brain, which may be caused by a weak heart, or the absence of accustomed stimuli. There will be great pain often fixed to one part of the head, blindness, or deafness, and perhaps delirium. But if we look carefully into the symptoms, we shall find that the pulse often intermits, or varies in some way, and is softer than natural ; the tongue is more creamy and tremulous ; the manner hurried, but not excited ; the countenance heavy. The patient may also ask for stimulus, which he would hardly do if he were labouring under inflammation.

REVIEWS.

On the Injurious Effects of Mineral Poisons in the Practice of Medicine. By Horatio Prater, M.D. Fcp. 8vo. London. 1846. pp. 96.

Doctor Horatio Prater is no common man, at least he says so. That we may duly understand and appreciate this sublime fact, before entering upon a perusal of his book, he graciously signifies upon its title page his numerous achievements, and regular "down-easters" they are. He denominates, or dubs himself, "Discoverer of the Fusible Compound of Carbon and Silica" !!—we should uncommonly like to see this magical mixture—"of the peculiar agency of lime on the tonicity of muscular fibre ; of the permanent fluidity of the blood by a heat of 140 deg. ; of the acceleration of its coagulation by ammonia, carbonate of soda, &c. (at p. 94 he tells us *carbonate of soda tends to keep the blood fluid!*) ; of the cause of the coagulation of albumen by heat ; of the diffusive power of the gases ; and conjointly with Fizeau, of Mosers Images ; author of *Experimental Inquiries in Chemical Physiology, &c. &c. &c.*" What the three finishing *et ceteras* mean, we are not informed, but suppose them intended to symbolise discoveries too numerous to mention. Now, after having done so much, and shut out Brande, Graham, and others, it is a pity the doctor did not go a step further when he was at it, and take the safety lamp out of poor Davy's hands, knock old Watt off the steam-engine, and swear himself the originator of both.

Epictetus somewhere says, it is often good not to be over virtuous; the doctor seems to think it is of no use being over modest, and therefore to save other people the trouble, enunciates, *pomposo*, his own praise ; taking his cue from the people of Athens, who, "in their reply to Pericles, rightly took the credit of what they themselves had done, and directed *their* name to be inscribed on the temples they themselves had reared." (P. xii.) So we see that, after all, there is something classical in nicknames.

The work commences with an epitome of the system of Cornaro ; a system which very judiciously rewards its followers by starving them to death. In treating this subject, the doctor has fairly knocked his head against the *elixir vitæ*, and realised at a single effort of mind the dreams of alchemy. The foundation of his principle is that generous old rule which tells us, that "one good turn deserves another," he therefore proposes that children, lawfully begotten of their parents, should gratefully perform a reflex function upon them when antiquated, by begetting them over again—not in the ordinary way of course, but of transfusion. "The means now alluded to, are the transfusion of the blood of one of its *full-grown* and healthy offspring, back again to the old parent, at certain intervals, where the parent, as in Cornaro's case, seems on the verge of death from mere loss of vital power." (P. 17.) "If there be anything approaching to the character of an *elixir vitæ* in nature, it seems more reasonable to look for it in the blood of the adult and healthy offspring, than perhaps to any other source." (p. 18.) The fact may now be considered fairly settled, that people need not die unless they like, and the doctor may fairly add to his other titles, "Discoverer of the means for turning old folks into young ones." He has more love of fame than of money, he says (p. 12), or otherwise, if he were to patent the process, it would bring lots of "grist to the mill." He does not stop short, however, with the blood, as the material to manufacture people's lives with ; for the "used up," he tells us that "eggs and oysters, as evidently containing a *vital principle*, may be used as nutriment; for, from their exciting nature, they seem perhaps to impart a certain quantity of this to those who use them." (p. 19.) Byron says—

"Oysters and eggs are amatory food,"

and the doctor proves that there is something more than poetry in the assertion. We should very much like to know what would be the effect of the *vital principle* of an egg, or an oyster, upon an individual partaking of either of these said things for a long time together. Whether the one would cause a man to cackle, *post defecationem*, turn his nose into a comb, his ankle bones into spurs, his whiskers into wattles, or his hair into feathers ?—and especially whether it would cause him to *crow?*—in which case it would be a capital remedy for bashfulness. Whether the other would be likely to make one scaly, cold-blooded, selfish, alter one's sex, and the like ? These points, very important as items of natural history, we hope the doctor will attend to, and, if possible, get decided.

He propounds other two very significant questions, "Does the optic or frontal nerve of an animal *just killed*, laid on the upper eyelid, benefit amaurosis ?—or the spinal marrow of the same, laid or rubbed on the spine of a debilitated old man, give any additional strength ?" (p. 19.) This very much reminds us of "experiment in joke made science in earnest." But no doubt there is a good deal of matter of fact connected with this questioning. We have often wondered why the managers of elephants should have such long noses ? We now remember that these men are often in the habit of holding a close facial correspondence with the brutes they tutor, and that, as a trunk is nothing but a prolongation of a nose, thus one may have acquired something of a resemblance to the other by the magic influence of contact. Perhaps Bottom, the weaver, got his physiognomy altered by lying cheek by jowl with an ass. We should like to know whether a fool, by rubbing his head against a philosopher's, would get an increase of wisdom ?

At page 21 the doctor tumbles upon another discovery, namely, "that a difference in the arrangement of the atoms of matter, is perfectly equivalent to a difference in its original nature, a conclusion arrived at in my experimental inquiry into Liebig's views on fermentation." We really had fancied this elemental chemical fact had been discovered long before Dr. Prater had meddled with crucibles and retorts ; but he says not, and it is scarcely worth while to contradict him. He offers, however, a very important suggestion, founded thereon. It is that "silica might under certain treatment become nutritious. Silica in the form of jelly might be tried, mixed in proportions gradually increasing in young animals with milk, or in adult animals with their usual food." (p. 22.) Here, again, we seem to be on the verge of another discovery nearly equal to that of the elixir vitæ, viz : that if a man ask for bread, and you give him a stone, you are not starving him after all. A lump of jelled silica may some day be as acceptable to an empty stomach as a barm dumpling or a roast potato. Shakspere no doubt thought he was very poetical when he talked of "sermons in stones," but what is this compared to eating them ?

At page 24 the doctor tells us that "silica in the gelatinous state is differently arranged (if a *simple* substance can be so) from what it is as mere silica powder." Another discovery! Chemists have hitherto been stupid enough to fancy silica a compound, but the doctor enlightens them with the fact that it is a simple substance ! He proves that the siliceous food may be taken by cats with impunity. He gave a lot of it to a tabby, and analysed its fæces, which were for the most part in a very satisfactory state. In the final bulletin, the doctor says, "The cat, I am glad to say, has remained quite well, now three weeks after the experiment." (P. 93.) He experimented on another cat, and astonished it so much, that, in self defence, it was obliged to destroy itself. "I found, however," says the doctor, "after the cat had been made to eat bread and milk, with which sulphate of lead was mixed, for some days, that a decided palsy of the limbs took place to my dissatisfaction, and the poor animal, in a state of half delirium, committed a sort of suicide by jumping out of an open window." (P. 60.) A notion prevails amongst old women, that a cat always falls on its feet. Dr. Prater may gravely assure them that he has proved from experimental research, that the law of a cat's descent out of a window is not universal.

The book winds up with observations on training, quite equal to anything in Bell's Life, or Fistiana ; a panegyric on Morrison's pills ; recipes for liquors of longevity ; and some sublime speculations on mesmerism. We must not forget to mention that the doctor is a poet, and by no means a common one, as the following lines testify :

We know some love smoking—smoke half the day ;
To all our great smokers here then we say,—
Adopt this new plan, smoke too *all the night*
Your camphor cigar, which ne'er wanteth a light !
Thus by you, *in your life*, no worms will be fed
Quite enough to be eaten by them *when you're dead!*

We feel assured, after the specimens we have given of the author's talent, philosophical, chemical, logical, and literary, that our readers will conclude, as we do, that Dr. Horatio Prater is far above all praise of ours.

An Essay on the Wear and Tear of Human Life. By G. T. Hayden, M.B., &c. Dublin: Fannin and Co.

This is undoubtedly one of the curiosities of literature. Much that is curious is given in a style, if possible, more curious ; and with the whole there is a dash of cleverness and occasional good sense which gives the volume every groundwork necessary to complete the piquancy of its interest. Without attempting to criticise by unalterable laws an effusion evidently written without any knowledge or fear of them in the mind of the author, we shall give a few extracts, and leave our readers to pronounce their own sound judgment!—

"The *lymphatics* are the antagonists of the secreting arteries, for the former remove what the latter had deposited. This branch of the absorbent system takes up all the integrant parts of the body ; is the remover of the *old* material, while the lacteals are the carriers of but one fluid (chyle), and that is the *new* product. The lymphatics are, as J. Hunter justly described them, the architects or modellers of the system. It is by the action of these ever-busy agents, that the body is fashioned and preserved from infancy to manhood—from the miniature to the full length likeness—in the appropriate and due relative proportions of its individual parts to each other and to the whole. It is plain, that the particles just deposited must be absorbed (so as to afford a space), before the deposition of the new ; and in the case of progressive growth, the space left for the secretion of the substitute should be so moulded as to accurately admit a certain sized integrant particle, and no more. The material so absorbed is, in the next place, commingled with the chyle in the parent trunk—the thoracic duct—and then returned to the sanguiferous system, by which it had been originally produced, to be either ejected, or, perhaps, employed for some secondary purpose. Since this process is constantly going on, the absorption of old, and deposition of new material throughout the whole body—a period must arrive when it may be truly said, we are re-made—having none of the original integrant particles. The reformation is supposed to take place in about seven

years. We before alluded to this process in bone—*a fortiori*, if it goes on so rapidly in the hardest parts, how much more speedily must it progress in the soft and more vascular parts of the animal body. We shall endeavour to exemplify this matter by an instance of every-day occurrence. Let us take an individual who is plump and fat; suppose him to be seized with fever—confined to bed for a month or six weeks. He now rises thin, nay, emaciated. What is the explanation? It is this. His digestive apparatus had been incapacitated, during illness, for the formation of the nutritive chyle, to supply the wants of the system, by replenishing the blood. The lymphatics absorbed the store of nutriment laid up, namely, the fat, and threw it into the circulating system—precisely as occurs in the hybernating animals (bear, sloth, and swallow), during their dormant state. The skin that had been tense and smooth, owing to the full deposition of fat beneath its surface, previous to the fever, has now become lax, flabby, and wrinkled, because the subcutaneous adipose development no longer exists. It has been all absorption but no secretion. However, there is no breach of surface; the patient has lost fat and flesh, which loss has been caused by an *interstitial* absorption from the cellular substance that hath contained both; collapse is, therefore, the inevitable result. Returning health—country air—keen appetite—generous diet, soon afford an abundant supply of nutritious chyle to the blood, which, in its turn, furnishes to the secreting arteries, the rich vital current; the latter quickly reproduces the adipose substance. Voila! our 'fat friend,' soon reappears 'himself again!'

"In early life, this function is exceedingly energetic; for abundant and speedy supply is then required for the purposes of growth. In late life, an opposite condition obtains in relation to lacteal absorption, while that of the lymphatics (interstitial) appears to be increased (in relation to deposition), which is but too plainly manifested by the spare, attenuated, and wrinkled condition of old age. In manhood, absorption—more especially lacteal—stands as a man between these extremes; neither so active as in the former, nor so sluggish as in the latter period of existence. As the habits of man are generally considered more active than those of woman, the function of absorption is, consequently, proportionably increased in the former. In the sanguine and muscular temperaments the active condition of the functions of digestion, circulation, and locomotion renders the energetic development of absorption more necessary than in any other temperaments. Wet and damp countries, where the atmosphere is constantly loaded with moisture, and the body surcharged with fluids, must—from the principle already proved—be less favourable for absorption than an opposite condition of climate.

"Nutritive absorption goes on much more actively in winter than in summer, as digestion is then more energetic; and besides, the demand for supply is more urgent in the former than in the latter period, owing to a greater exercise of the muscular system during the cold season. It is obvious that those of active habits, and accustomed to laborious occupations, must have more of wear and tear—greater expenditure, than those of sedentary habits who eschew exercise, and "the sweat of the brow." We have seen that an individual lost daily during two hours' hard labour in a warm atmosphere so much as ten pounds of his weight, and that on being weighed at three, six, and nine months a difference of but one or two pounds only was observable in relation to his original weight. It is plain that, in this instance, nutritive absorption must have taken place to a similar extent in order to compensate the system for the large loss sustained by exhalation.

"With reference to *fruits*, I have to remark that, generally speaking, they are to be esteemed by the valetudinarian as difficult of digestion. We are not, however, to interdict them altogether, for some species, particularly during a warm season, prove grateful, refreshing, and wholesome; and indeed the fact of their being so abundantly supplied by nature at this period, joined with the instinctive desire we have for them, would argue strongly in favour of their use. We will generally find that the derangement produced is caused by an injudicious selection of fruit—an excess in its quantity, and the fact of its being eaten at an improper time. Melons and stone fruit, with the exception of the ripe peach, are to be esteemed indigestible—melon and all cold fruits, cucumbers, &c., [particularly so—if the dyspeptic *will* eat the former, the horrible and dangerous act should be perpetrated with a plentiful supply of pepper and salt. Apples and pears are less prone to fermentation than most fruits; those that are disposed to torpid bowels will often be benefited by the last mentioned. Strawberries, raspberries, gooseberries, and grapes will be found, if eaten in moderation, and when perfectly ripe, cooling, digestible, and aperient. The husks, seeds, and skins of all fruits should be carefully avoided. Black currants are considered very wholesome. Oranges are general favourites, and, when ripe, may be freely used—the pulp should not be swallowed—the juice of this fruit and water make a grateful drink. Apples sliced and boiled in water also make an agreeable beverage. An observation we have often made in reference to articles of diet, is peculiarly applicable in relation to fruits, 'if eaten with a decided liking, it is surprising how rarely they disagree with the stomach.' Acescent fruits are most prone to interfere with digestion. The different forms of jams, jellies, &c., are very indigestible, owing to the large quantity (equal parts) of sugar added to the fruit to preserve it. It is fortunate that we are not often required to request children to eat little (jam *satis*) of these preserves, for they generally associate the latter with physic, and hence are inclined to "throw both to the dogs." Dried fruits are also open to objections for the same reason that jams and jellies are interdicted. We have somewhere heard it, as an 'old say,' that 'fruit was as gold in the morning, as silver at noon, and as brass in the evening.' Paris says, 'The most proper period for indulgence in fruits appears to be in the morning and evening. On some occasions it may be taken with advantage at breakfast, or three hours before dinner, and it affords a light and agreeable repast if taken an hour before bed-time; but,' he judiciously adds, 'these regulations are to be influenced by circumstances which no general rule can possibly embrace.' It is therefore so necessary that the close and accurate observation of the valetudinarian *himself* shall constantly be directed to time, quality, and quantity, as the grand tripod upon which dietetics rest.

"Dr. Johnson observes that the wear and tear complaint is almost peculiar to England, and explains why it should predominate in London so much more than in Paris, because in London business is the almost only pleasure; in Paris, pleasure is the almost only business. In this respect Dublin may be said to hold a middle place—neither so busy as the former, nor so idle as the latter; hence its inhabitants, generally speaking, enjoy good health. If Pat had the prudence of John Bull, would eschew gentility, the besetting sin of Ireland, not ape his loftier and richer neighbours' habits, and consequently their expenditure, he would learn to live more contentedly and tranquilly in that state of life 'into which it had pleased God to call him.'

"My countrymen are too vain to be proud, while the Englishman is too proud to be vain; hence the former is always striving for that extrinsic, *nitor ultra vires*, to make his neighbours *stare;* the latter constantly working to produce intrinsic domestic *comforts* for himself and family.

"Are we to look for an explanation of this in organization, climate, soil, and its productions? A learned friend of ours attributes a vast deal of the developement, physical, moral, and intellectual, of the Irish, to—what do you think? You cannot guess!—you must give it up!' Well, then, '*Potato-diet* is the cause of all!'"

TO CORRESPONDENTS.

A Surgeon.—We see no illegality in the rules of the Benefit Club named. *The mode of appointing the Surgeon, however, is certainly objectionable.*

A Member *should address his letter to the Secretary of the Sydenham Society. Mr. Adams' translation is learned and clever; it has especial interest as the work of a general practitioner.*

A Subscriber *will, on reflection, see that we have no business with the tracts of the Society he mentions to us. The aims are useful; and though not opposed to ours, are yet beyond our province.*

Philo Medicus *is unnecessarily severe in his strictures on Mr. Battley's address to Medical Students.*

W. X. *is thanked for his extract from Tait, but we have no room for it.*

A Student *will find most of his remarks in Grainger's lecture on the Unhealthiness of Towns, and said with at least as much grace and force.*

Pharmaceuticus writes:—*It may not be known to the Pharmaceutical world generally that in the year 1686, an important work was dedicated to the Master, Wardens, cæterisque clariss. Societ. Pharmaceut. Lond. Sociis. Can you inform your readers what relation the young society is to the old one, or whether or not the Society in Bloomsbury Square is intended to supersede the venerable and ancient one so long known as the Pharmaceutical Society all over Europe?*

*** *The supercession does seem the avowed aim of the new Society. It may be added that the Apothecaries' Society has been always known to the Law and to the heads of the State as the Pharmaceutical Society.*

Mr. Thomas Yardley—*Anatomy cannot be properly learnt by plates; indeed in most cases they are worse than useless, as they give erroneous notions of the relations of parts.*

Mr. Ackland's *paper can only be inserted as an advertisement.*

G. G. *we fear is a hypochondriac. Why does he not call on the nearest medical man? his fears would then be set at rest at once and for ever.*

G. F. C. —*Let the subject rest for the present. The tether will soon be run out. We are obliged to our correspondent for his kind preference.*

Mr. Boyd's *Vapour Bath seems to be a simple and ingenious apparatus.*

Mr. Williams *will understand the point contended for more clearly after reading the conclusion of the paper alluded to.*

A Student *should ask the advice of the lecturer on Midwifery at the school he attends. Our correspondent can scarcely expect us to advise him where to attend Midwifery cases, when he does not even tell us whether or not he resides in London.*

Mr. Thomas Leithead.—*The worshipful Society of Apothecaries do not propose to prosecute duly licensed practitioners of any class. They still possess the power, however.*

We shall be happy to receive any communications from Mr. Davis. *The conclusion of our correspondent's letter alluding to* "damage," *is not quite clear to us.*

Mr. Close's *request shall be complied with. Unfortunately the manuscript had been mislaid.*

☞ *Subscribers in arrears since Midsummer are requested to communicate with our Publisher during the ensuing week.*

THE MEDICAL TIMES.

Saturday, July 25, 1846.

Ille profecto
Reddere personæ scit convenientia cuique.—*Horace.*

In our last article we "considered the relative importance, intellectually and educationally, of the clerical and the medical professions. The inference we drew, and we are not apprehensive of its truth being exceptionable, was, that not only are severer preparatory studies required of the candidate for medicine over and above what are required of the candidate for the pulpit, but that, in their subsequent professional exercises, more practical learning, and much more mental and bodily labour, are demanded of the physician, or surgeon, than of the parson. We conscientiously believe in the orthodoxy of our deduction; and are fully satisfied that, from any impartial tribunal, a similar judgment would be given. So much for the intellectual relation of the two parties.

As regards the *morale* of the two, it is difficult to speak openly, and not invidiously. Whilst we are utterly adverse to say anything to the disparagement of our ecclesiastical brethren, we are yet, in all justice, called upon to vindicate and maintain our own dignity. Believing, as we do, that we are often slandered and derided when we deserve no such stigma, it becomes us to assert our own character on those points whereon the public are apt to misjudge us.

To begin with college days. Will any man, competent to judge of the respective parties, venture to affirm, that better discipline, better general conduct, or better moral propriety, is characteristic of the student of divinity than of the student of medicine? We have no fear of any such opinion issuing from any source other than one incompetent to judge at all, or not honest enough to judge fairly. Medical students, all the world over, are targets for popular prejudice to fire at. They are accounted

fair game, and nobody hesitates to make a hit at them. An old superstition paints the devil with horns, and cloven feet, and a tail, sometimes dragging, and sometimes curled round his arm. At this moment, an anecdote bursts in upon our memory, and we cannot resist relating it.

It is said of Cuvier, that, one day walking where Æneas is said to have walked, a certain repulsive personage met him, and demanded of him worship. "No, I will not worship you," said Cuvier. "Yes, you must," said the horrible. "No, I shall not," replied the other. "Then," said the demon, "if you do not, I will eat you!" Cuvier eyed him deliberately, and instead of defying him, as no doubt he might have done, preferred falling back upon the natural history lessons of his mundane life, and said—"horns, and cloven feet—*graminivorous—you eat me—nonsense!*"

Perhaps the anecdote may be worthy of the episode it has caused; if so, we will proceed with the discourse we were entering upon concerning medical students. As we said, in conformity with popular prejudices, they are looked upon as something terrible—little short of awful, desperate, diabolical, or what else you will. Nobody, now-a-days, ever thinks of figuring in his mind's-eye a medical student, except in a pea-coat, with long hair and large buttons; thick shoes on his feet; a thick stick in his hand; a belcher tie round his throat; and a seedy white hat on his head. Added to these things, he should have a bull-dog following him sneakishly; a stealthy look-out for creditors when he's sober, and a devil-may-care swagger when he's drunk—the latter condition being generally in the ascendant. He should never be known to be without two or three street-door knockers in the poacher-like pockets of his coat; he should never be able to pay a tavern-bill when it's called for—and always be ready to fight the waiter, or anybody else, who may venture to dispute a reckoning with him. These, with a few other items, not necessary to enumerate, make up the medical student as the public regard him. But this is not all. Not only do the public picture him as they like, but they unhesitatingly visit him with all sorts of responsibilities. If an antiquated old lady, in a country village, lose her favourite tabby, or any *soi-disant* young lady be parted from her pet spaniel—who is the offender? Of course the apothecaries' young man—he is the thief—he has stolen the poor animal—no doubt for some cruel experiment; and, before next week, the only remnant may be a grinning skeleton! If any outrage be perpetrated in a large town, or in its neighbourhood, sure as fate the imputation rests upon a gang of medical students! If a public-house sign-board be fresh painted, or turned upside-down, or taken away altogether; if a stable-door be nailed up, or lifted from its hinges, or sent swimming into a horse-pond; if the pinfold-gate be broken down, and the hungry prisoners let loose; if the local decorum and decency be in anywise disregarded or defied, as in throwing down a cracker, or sending up a rocket; nailing up a watch-box, or knocking down a policeman; kicking over an apple-stall, or kissing a stray servant-maid;—poor medical students come in as the responsibilities for all. They are respectable men—they have got lots of money—they can afford the disgrace—fasten the offence upon them, whether they have committed it or not—the game is certain—they are sure to pay! So it is.

In capitals, and in places where medical education is rife, the students make most excellent game. Nothing popular, in fact, can be done without them. If a pop-bottle goes off in the gallery of the theatre, the author of the disturbance of course is a medical student; if any young gentleman in the pit, shout a stentorian "bravo," or "encore," or venture a hiss, or stand up, and with his hands in his pockets dare to wink his eye, or twink it, or even turn his eye at all, at the ladies in the boxes, forthwith he is nothing short of a medical student; if any man, not a horse-breaker, drive tandem through the streets, he can be none other than a medical student; if a hackney-coachman be squabbling with a passenger, upon whom he is endeavouring to impose, the aggrieved party is a medical student, and of course in the wrong; if any drunken boast be performing a hydrostatic feat in any public quarter, he is a medical student, and ought to be ashamed of himself; if a policeman be dragging a sinner along the street, with a crowd at his heels, the imprecations, yells, cat-calls, and curses, are at the medical student! Such are the sins perpetrated against us, and yet, without a murmur!

Nay, to such a pitch has the insult against us risen, that if a common thief, found with a tavern-can in his pocket, or a silver spoon, or anything else, neither too hot nor too heavy to carry away, be asked the peculiar questions usually pointed at men under such circumstances, he invariably precedes his answers by stating that he is a medical student. His name may be Smith, Jones, Rogers, or Robinson—no matter what—the patronymic is nothing—the calling is all—medical studentship is the business—and the responsibility is secure! No riot, no row, no outrage of any kind, not even a local street tumult, can occur in a place where medical students congregate, but instanter they are considered at the bottom of it all! Poor fellows! no matter what their *bonâ fide* sins; they have to bear the brunt of as many more as popular prejudice and absurdity choose to fasten upon them. Because they are accustomed to be witnesses of the ravages of diseases, and are used to see the evidences of death in its many phases, and under these painful circumstances betray no puny emotion, and exhibit no false-hearted regret—not being prepared, like Job Trotter, with a small clean pocket handkerchief, and a pair of weeping eyes, for every little mournful occasion—for the want of these things they are scouted as infidels, brutes, unfeeling creatures, non-naturals, and nobody knows what besides! If they exhibit tender-heartedness, they are hypocritical or foolish—if they converse, they are brutal! Do what they will, they are sinners, and nobody sympathises with them. They might be Irishmen, every man of them; for then, as Swift says, they would be cursed, in due form, accordingly.

Oh! to us, who have mingled right well amongst the ranks of students of every denomination, the injustice done to our order is gross enough. "The offence is rank," and deserves the reprobation of every honest man. Many have been the offences we have known the pale-faced, meek-eyed, sycophant, shrouded in his assumed sanctity of study, commit, and with an impunity which would have defied detection in any other man. We have watched at many a carousal, where the two classes we speak of have mingled together, and have each forgot the decencies of sobriety in due form; but the poor medical student, no more degraded, but much less plausible and morally pathetic in his degradation than his fellow-toper, got off with far smaller credit. When better means have failed, we have known a student of divinity sing a snatch of a psalm—or utter a maudlin sentimentality of some kind—or drop a tear of sympathy over some imaginary object of commiseration—and all to screen the evidences of his own disgrace! Such men have so many means of shelter in their keeping, that not only can they hide themselves therein to their own satisfaction, but effectually defy the public to find them out. The very sanctity of their calling is such as to raise them above suspicion. Impugn any man, be his offence as glaring as it may, and instantly you are liable for sacrilege! We have known students of divinity do openly, and with impunity, certain things whose committal would for ever have stamped the fate of a student of medicine. And why? Because, on the one hand, it is taken for granted that the impugned individual is engaged in a calling far above the liability to such enormities, how far soever the perpetration of them may seem to apply to him; and on the other, the partial sinner gets the credit of the whole offence, because no hypocrisy or cant on his part has shielded him from public opprobrium or suspicion. To enter into individual evidences would not consist with our sense of fairness; but we have not the slightest hesitation in saying, not only that medical students generally are the subjects of gross public prejudices, and have imputed to them offences wherewith they are in no wise chargeable; but that, if their brethren of the more sombre caste were criticised as keenly, they would be found one-half as daring, and ten times as secretly sinful.

THE NATIONAL INSTITUTE.

The steady increase of popularity which greets this importunity project is most gratifying: and the steady energy and deliberate zeal with which the Committee of the Association are advancing all its preparatory arrangements command universal praise. The approaching meeting, in which the decisive step is to be taken of definitely establishing the Institute, is looked forward to with no ordinary anxiety. It is the great event which is to decide for attained good or perpetuated evil the fortunes of the profession. We earnestly trust that our readers will omit no duty on their part which may tend to give the first National Institute the profession has yet voluntarily combined to erect, a fair and full chance of a good start and ultimate triumph. The Institute belongs to no collegiate clique or professional grade: it is the institute of the whole profession of the British Empire; and there is not one impolitic rule, bye-law, or condition to exclude from its comprehensive bosom any legitimate member of the kindred community. Membership will detract from no man's worth or standing: giving at once cohesion, respectability and power to the whole body, it will rather attach additional influence and standing to each component. But this portion of the subject is so well handled by by Mr. Herbert Barker, in a pamphlet recently published by him, that we shall prefer to address our readers in his language.

FIRST—TO THE MEMBERS OF THE NATIONAL ASSOCIATION.

The difficulties which surround the carrying out of a scheme of the magnitude and importance of the proposed National Institute are immense; and it is evident that the most cordial and persevering co-operation of most of the practitioners throughout the country, will be required to second the efforts of the committee of the association, in order that the scheme may be put into effective operation. In the words of the committee—'If they are not disposed to do so with zeal, and even with enthusiasm, or by some other means to maintain an effective organization, all amelioration of their condition is hopeless.'

A large annual sum will be required for the objects which have been referred to; yet, if from five to ten thousand general practitioners act so far in concert, as to subscribe a small sum each annually, a very large yearly income will be derived; it is desirable therefore that every member of the association should give in his adherence to the plan which has been proposed, and,

at the same time, intimate his readiness to assist in th pecuniary support of the institute, by naming a su which he will be willing to contribute to its funds.

Another indispensable requisite to the permanent e tablishment and efficient working of such an institutio is, that the utmost confidence be reposed in its execu tive council, and particularly in those upon whom th duty may be imposed of carrying the wishes of the pro fession into effect in the first instance. The conduc of the committee of the association through the mo trying and critical seasons of its existence would natu ally point to that body as the most fit to be entruste with the highly important duty of completing the p posed design. From their recent exhibitions of tal and zeal in the cause of the class which they represen the members of the association may continue most con fidently to repose their affairs in the hands of those gen tlemen, who will at all times be ready to give their m ture consideration to any suggestions which may l offered; and it must ever be borne in mind, that thei objects and interests are identical with those of th members at large. The wants and interests of th entire body are equally the wants and interests of th committee themselves.

The enrolled members of the National Institute wi be entitled to vote for the members of the council thus will be secured to them a council of their own elected by the majority, and, consequently, to thi council may safely be entrusted the election of the pr sident and vice-presidents, and the preparation of a cod of laws for the regulation of its affairs, *which will b subject to the approval of a general meeting of th members.*

Through the medium of a council so constituted every one in general practice may have a voice in th control of the affairs of the Institute; his position in a legislative or political point of view will thereby be con siderably improved; and the affairs of the class to which he belongs, must necessarily be most satisfac torily adjusted.

An appeal will be made to the members for contribu tions to the pages of the transactions, a general an hearty response to which cannot fail to be of grea utility.

The plan upon which the Library will be conducted will render it more generally available and useful to th profession than any other Library in existence; an the Museum, from its practical nature, will become a vast storehouse of pathology, and a collection, to which every member will be proud to present morbid speci mens from time to time, as he may have an opportunity of thus extending its usefulness. As an illustration of the enthusiasm with which the Institute is hailed by some, it may be mentioned that one gentleman has in timated that he is prepared to deposit at once, as a nucleus, a collection made by his own hands, of three thousand specimens in natural history.

As the members of the Association have already taken an effective part in the movement, it is only necessary to exhort them to complete what they have so auspiciously commenced. You have manifested, by your co-operation with so many of your brethren in the formation of a large Association, that at one time you considered a necessity existed for this combination; you have now an opportunity of assisting in carrying out far more extensive, more important, and nobler designs than have ever engaged the attention of any body of the profession. Only let that assistance be given with zeal and unanimity, and every object will be accomplished. With feelings of pride, you will shortly be able to point to a great and successful Insti tution, and at the same time enjoy the reflection that you share the honour of having reared so useful an edifice, and of having contributed to elevate the status of the profession to which you belong.

SECONDLY—TO THOSE WHO ARE NOT MEMBERS OF THE NATIONAL ASSOCIATION.

If the county of Bedford may be taken as an exam ple of the kingdom, the number coming under this head is but small, there being fewer than one-sixth of the general practitioners of that county who have not already joined the National Association.

Some have not joined it, from a hope that the Coun cil of the College of Surgeons would procure a supple mental Charter, by which the wrong which has been done to most of the members of that College would be redressed; but every appeal which has been made to the Council has been in vain; and since the ill timed and unhappy vindication of its proceedings by the last Hunterian Orator, the staunchest friends of the College must have been convinced that such alterations as would constitute it *the* College—the head and home of the general practitioners,—are hopeless and impracticable.

There are others who, having acquired an honourable independence, are content to enjoy their *otium cum dignitate*, manifesting by their supineness, an apparent indifference to the progress of medical affairs, and the success of any efforts directed to the prosperity of the profession at large. If these gentlemen cannot be induced to take an active and zealous part in the work, after the example of our venerable presi dent, who, although he has acquired a well earned reputation and an ample fortune, is devoting his energies, his time, as well as considerable pecuniary aid to the improvement of his class, they surely must have the welfare of the profession and public sufficiently at heart, to lend their *passive* assistance, by joining an Association with these objects in view.

Some think themselves too much engaged in their professional pursuits to be able to give the slightest consideration to any other subject, leaving everything relating to Medical Bills and Associations to their younger and less occupied brethren. Such conduct is directly opposed to that of the members of the Committee, who, although most extensively engaged in the practice of their profession, and not expecting to reap any *personal* advantages, have devoted much time and attention to the subjects which have come under their notice. This they have not done merely for a week or a month, but even daily for many months, with a disinterested zeal truly admirable and worthy of imitation. The transactions referred to form a monument of combined industry, well calculated to stimulate us to greater activity and energy.

Other members of our peaceful profession, with an antipathy to any movement having the least appearance of political agitation; and perhaps, having witnessed the rise and fall of numerous minor Associations, which have lacked the elements of perpetuity and usefulness, have refrained from giving their assent to the National Association on these grounds. They may be confidently assured that this Association has arisen solely from the emergency of the times, and the perilous position of their own class, and not from a spirit of factious opposition to existing laws and institutions. Their serious attention is invited to the proceedings of the Committee, as the most satisfactory refutation of the suspicion of interested faction or agitation.

Some, participating in the liberal political views of the day, and carrying a species of ultra-liberalism into medical politics, have denounced the proceedings of the Colleges, and of all protective medical Associations, proclaiming for "*free trade in Physic.*" The number of this class of objectors is very small, probably the smallest of any, but should these observations meet the eyes of such, let them reflect on the relative condition of the public and profession during the last thirty years, as compared with that condition *before* the passing of the Apothecaries' Act, and let them also maturely reflect on the consequences of unrestricted practice, in reference particularly to the poorer classes of the people, and to the status and respectability of the educated part of the profession. The medical man who can seriously avow these principles, as applicable to medical affairs, possesses but slight feeling of true humanity, and surely wants the *amour-propre* of his profession.

Lastly, to those who have so magnified a view of the difficulties in the way of attaining the objects aimed at as to remain neutral and inactive, we would observe, that there are no difficulties so great, but that they may be overcome by well-directed, and persevering efforts. In the National Association, a powerful combination is already formed to hand, which will be rendered still more effective by every accession to its numbers.

The same zeal and unanimity which organized that Association, and successfully parried the destructive blow with which the profession was menaced, will place the National Institute upon a firm footing; and the only question for these gentlemen to decide, is, whether they will remain mere lookers-on, until every obstacle shall have been thrown down, and a great College reared, of whose fostering aid they will then be glad to avail themselves; or whether they will participate with their brethren in the proud satisfaction of having contributed their share of influence towards its establishment, with all its accompanying advantages, both to the profession and the public.

"*Auxilia humilia firma consensus facit.*"

LABERIUS.

We will just add to these pertinent and forcible remarks that any gentleman wishing to join the new institute may send in his adhesion in a letter of this form:—

GENTLEMEN,—I beg to forward my replies to the following Questions:—

Are you willing to co operate in the formation of a National Institute of Medicine, Surgery, and Midwifery, upon the plan detailed in the accompanying Letter, by becoming a Member, and contributing towards its support?	
2. That the Committee may be enabled to estimate the sum at which the Annual Contribution for the support of the Institute should be fixed, what is your opinion as to the amount of such payment by the Metropolitan and Provincial Members respectively?	For Metropolitan Members? £. s. d.
	For Provincial Members? £. s. d.
3. At what period after the Date of his Qualification to Practise should a Member of the new Institute be eligible for a Seat in the Council?	Unlimited?
	5 yrs.?
	10 yrs.?
	15 yrs.?

I am,
Gentlemen,
Your obedient Servant,
Name ————
Residence ————
Qualification ————

To the Committee of the National Association of General Practitioners in Medicine, Surgery, and Midwifery,
294, Regent Street.

MISCELLANEOUS CORRESPONDENCE.

PRACTICAL REMARKS ON SOME POINTS OF TRICHOPATHY, AND THE CHEMICAL PATHOLOGY OF THE HUMAN HAIR, by THOMAS CATTELL, Esq., of Braunston, Northamptonshire, M.D., M.R.C.S.E.

(To the Editor of the Medical Times.)

SIR,—It is greatly to be hoped that Dr. Cattell is better versed in the principles and practice of medicine than, by his writings, he appears to be in the elements of chemistry; if he be not, the inhabitants of Braunston, or at least those of them who may patronise the doctor, must be more indebted to the *vis medicatrix naturæ*, than to the curative effects of art.

Thomas Cattell, Esq., M.D., M.R.S.C.E., condescends to edify the readers of *The Lancet* by writing on hair-dyes; and, considering that he is writing on a subject of which he knows nothing, I must confess he discourses most learnedly. Colouring and decolorising are too common-place terms, and, accordingly, he embellishes his lucubration with the euphonious compounds, *tricho-dyschroia*, *tricho-crosology*, &c., &c.!!! I much admire refined language when it is necessary for the exemplification of the subject; but when used only with the hope of mystifying, it is really as nauseous as it is unpardonable.

With a grand flourish of penny trumpets, commencing with *tricho-dyschroia*, the doctor gravely informs the profession of the bleaching property of gaseous chlorine!! As, however, this important fact is known to every washerwoman, we will take it for granted that the doctor is correct in his discovery. I also coincide with him in, and believe he deserves the thanks of the profession for his suggestion that "the constant use of a diet deficient in the elements of the hair *may* stand as the proximate cause of its change of colour!" Under the head *Tricho-crosology* Dr. Cattell presents us with seven formulæ for dying the hair. These he divides into the three several classes of *Plumaform*, *Steariform*, and *Chulosiform* dyes!

The Plumaform consists of oxide lead, 3oz.; carbonate lime, 2 oz., mixed with water, and applied to the hair enveloped in oil silk.

The second recipe is similar in its nature, carbonate being substituted in lieu of oxide of lead.

Of these two compounds all I have to say is, that neither will answer the purpose. The doctor must expel the carbonic acid, and then convert the resultant into a *hydrate*, before he can succeed in even tinting the hair with these remedies.

The *Steariform*, and three out of the four *Chulosiform* dyes are compounds so uniquely chemical, that I feel incompetent to comment upon them. I rest content with the simple remark, that the admixture of soap (I beg the Doctor's pardon—I mean, "*Sapo viridis*") with nitric acid and caustic, is a cut above my comprehension—profoundly hyper-chemical, and best let alone.

We now come to a recipe, which, to use the learned doctor's own words, "claims a decided preference over all those previously enumerated, which can produce injury to neither the hair, skin, nor brain, *and which possesses the advantage of communicating a beautiful colour and curling property to the hair!!!*"

Would any reasonable being believe that the com-

position which the Doctor thus eulogises possesses *none* of the properties asserted in the panegyric?—could any one credit that an M.D. and M.R.C.S. would so expose his ignorance as to avow himself the inventor of a compound which the veriest tyro in chemistry must see at a glance is nothing more than *glue and goulard!!*

The learned man thus directs us to make his aq. mirabilis:—

"Lead filings, 2 oz.

"Hartshorn shavings, 1 oz.

"Oxide lead, 6 dr.

"Camphor, 1 dr.

"Water, 1 lb. Boil for half an hour, and, *when fine*, pour off the supernatant liquor on diacetate of lead and rosemary leaves, of each one drachm. Again boil, and when sufficiently fine, pour off the supernatant liquor which constitutes the dye." Now the only soluble ingredients composing this hotch potch are the sugar of lead and the gelatine! Hartshorn shavings, according to Merat Guillot (Traite de Chim, vij. 643) consist of Phosphate of lime, 57·5; Soluble Cartilage (Gelatine and Chondrine) 27·0; Carbonate lime, 1·0, and water; and merely gives out by aqueous decoction gelatine to the menstruum, the carbonate and phosphate of lime being deposited; as is also the case with the oxide of lead and the lead filings, which are insoluble! The part the gelatine is intended to play I cannot divine, as it is well known to manifest so little tendency to unite with the metallic oxides. The doctor thinks the long boiling may increase the solubility of his oxide and facilitate the oxidation of his filings,—a result he evidently aims at, but he should recollect (if he ever knew) that the chances of this are lessened by the viscidity of the menstruum, and, in addition, are entirely prevented by the presence of the phosphate, 1-30·000 of that salt being sufficient.

But we are directed, *after the subsidence*, to pour off fine and again boil. This second boiling can only be intended to *volatilise* the camphor and destroy the aroma of the rosemary. Having effected this, we again decant the "supernatant liquor," which terminates the process, and to compensate us for our trouble, we shall possess a hydrate of gelatine (which, on cooling *solidifies*), mixed with diacetate of lead!!!—a good remedy, truly, "*for communicating a beautiful colour and curling property to the hair.*"

For "*Calvities* and *Alopecia* the doctor possesses remedies, *uniformly* efficacious." The kind, humane man renders palpable his possession of Christian blood by giving us, without a fee, directions how to prepare the famous specific: "Rosemary, maiden hair, Southern wood, myrtle berries, and hazel bark, of each 3oz. These are to be incinerated, and with the incinerated mass make a strong ley, with which to wash the hair every day!" This roundabout way of making salt of tartar is equalled only by the Frenchman's remedy for the destruction of fleas.

The doctor terminates the account of his brilliant discoveries by "trusting that professional men will for the future, and *not nostrum mongers*, take charge of the diseases and affections of the hair." I hope they may; but upon my honour I should be extremely sorry to trust my capillary growth to the treatment of Dr. Cattell. With all due deference for the seven initials he attaches to his sponsorial patronymic, I should still prefer placing my canister under the hands of the Rowlands, Kirbys, the Rosses, and Bernards et id genus omne. I hope the doctor in his next communication will give us less Greek, but *more* sense than characterises his paper, and that its editor will no longer insult the few remaining readers of *The Lancet* by admitting into its columns the ravings of every madman labouring under the ca coethes scribendi.

Your obedient servant,

A. H. B.

Stoke Newington, July 13, 1846.

WESTERN CIRCUIT.

WINCHESTER, THURSDAY, JULY 16.

MR. HAWKEY'S TRIAL.—With reference to the point of law, whether a party inflicting a wound is answerable for any consequences which may ensue on the medical or surgical treatment of that wound—

Mr. Cockburn repeated the two objections which were made at the trial of Mr. Pym, and overruled by Mr. Justice Erle; first, that there was no evidence before the jury to make this a case of wilful murder There was no authority in the law of England for saying that, where a wound was inflicted by one party upon another, and in the course of the treatment of that wound an operation was performed of which the patient died, the party inflicting the original wound was guilty of wilful murder. In every one of the cases referred to by the text-writers (Russell on Crimes, vol. i., p. 505), the cause of death, though not immediately proceeding from the wound, was the result of natural consequences supervening thereupon, and the physical effects of that wound, such as fever or gangrene. But in this case the cause of death was a state of things supervening upon the treatment, not upon the wound. In the Scotch law, however, cases had occurred (Allinson's Principles of the Law of Scotland, vol. i., p. 145), which showed that that law recognised the distinction. The other objection was to the form of the indictment, which charged the prisoner with having fired a pistol loaded with ball, which inflicted a mortal wound, of which he died. He contended that the indictment was bad, for not truly stating the cause of death; it had held, on a case reserved, where a prisoner was charged with striking a man with a stick or stone, and thereby causing death, whereas it appeared in evidence that the prisoner struck the deceased with his fist, and knocked him against a brick or stone. The facts in this case were, that the prisoner discharged a pistol at the deceased, thereby inflicting a wound, which rendered medical treatment necessary, and that medical treatment caused another wound, of which other wound the party died. How then could the jury say that he died of a wound inflicted by a pistol ball?

Mr. Baron Platt overruled both objections, reserving the points. With reference to the first, the learned judge observed, if a man received a wound, certain consequences attended that wound, and if the party died of these consequences, his death was caused by the original wound. And so with respect to *bonâ fide* medical treatment. Suppose a man wounded by robbers, for which wound he received medical treatment and died from an operation; could it be said that the robbers were not guilty of murder? The last objection was met by the evidence of Dr. Stewart, who stated that the causes of death were two; the one primary, the pistol-ball; the other secondary, the medical treatment.

MIDLAND CIRCUIT.

NORTHAMPTON, WEDNESDAY, JULY 15.

CIVIL SIDE.

(Before Mr. Justice Coleridge and a Special Jury.)

Ashby and others, Executors *v.* Bates, Public Officer of the Argus Insurance Company.

This was an action by the executrix and executors of Richard Ashby, late farmer at Bugbrook, in this county, to recover from the Argus Insurance Company the sum of 500*l*, being the amount of a policy of insurance effected in that office in the month of April, 1844, upon the life of the said Richard Ashby, who died in the month of May, 1845.

Mr. Humfrey, Q.C., and Mr. Mellor conducted the case of the plaintiffs.

Mr. Whitehurst, Q.C., and Mr. Waddington, represented the office.

This cause was tried at the last assizes for Northampton, when a verdict was returned in favour of the office. A rule absolute for a new trial was afterwards obtained by Mr Humfrey in her Majesty's Court of Exchequer, on the ground of misdirection of the judge as to the mode in which the cause should be conducted, with reference particularly, due regard being had to the state of the record, to the right to begin and to reply. Our readers will remember that the Argus Insurance Company disputed the policy on the ground that the assurer, Ashby, had concealed a rupture with which he was affected, and of which he afterwards died. On the part of Ashby, it was alleged that the rupture had come on very recently, and only a few days before his death. A full report of the trial, with the medical evidence, may be found in No. 338 of the MEDICAL TIMES. The principal witness examined on the present occasion, in addition to those called on the former trial, was Mr. Partridge, whom the learned judge highly complimented on the manner in which he had given his evidence. He deposed, that taking all the circumstances and the appearances in combination—the smallness of the ring, the state of the omentum, the slightness of the adhesion, the healthy state of the intestine, the suddenness and violence of the attack on the day when the operation was performed, the largeness of the protrusion, the state of the patient in other respects, his paralysis, the emetic that he had taken, and all else that he had heard described, he was decidedly of opinion that the rupture was altogether recent. That was his conviction. The first surgeon, he said, had mistaken complex hydrocele for hernia. A truss was improper for irreducible hernia, unless when it was so made as to avoid pressure upon the part protruding. It would aggravate the evil. Had known many instances of persons, under favourable circumstances, themselves reducing old hernia supposed irreducible. If the first hernia had been down a long time, as from November to March, and been reduced and come down again, the appearances would have been different. Among other things the ring would have been larger. The concurrence of all things spoken to satisfied him that it was a case of recent hernia. Knew of no case, where the hernia had been down so long, and been pushed up and come down again with the appearances Mr. Nash had stated to have here existed.

Cross examined.—None of the symptoms of old hernia existed. The ring was small. The adhesion was slight. The omentum was healthy, except that the vessels were of course gorged. Hydrocele was sometimes mistaken for rupture. Thought that it might easily be so by an experienced man, where the hydrocele was going high up, or a thickening of the cord. Had himself kept a patient in the hospital for a day or so before he satisfied himself. That was a case of hydrocele with a thickening of the cord. Hydrocele and hernia might be mistaken, perhaps even when quite low down in the scrotum.

Cross examined by Mr. Humfrey.—In his opinion it was not possible that such a hernia as had been described could be reduced, leave no appearance, and come down again through the ring he had heard described. Thought it quite impossible that a hernia of such size as had been described, down on the 18th of November, the 9th of December, and in March, and pronounced irreducible on all three occasions by scientific medical men, and as being so bad that nothing could be done, could be placed back by the patient himself whilst in bed, who was almost all the while going about his usual business.

Mr. Justice COLERIDGE in summing up to the jury commenced by saying, that before he called their attention to the evidence, he must make one general observation. There was no ground whatever for treating this defence as an unfair or unjust resistance. If Ashby had mentioned, as he ought to have done and was bound to do, the fact of the swelled testicle to Dr. Robertson, all this expensive litigation would have been avoided. He then warned them to guard against prejudices. If their verdict should be against these poor people, it was the fault of the deceased man Ashby in making this unfortunate suppression. Who could wonder, after hearing the evidence, that the office should have thought it a matter that ought to be inquired into? He took first the issue of fraud in collusion with other persons, telling the jury that it was, of course, upon them who charged fraud to prove it. On the other hand, it was for the plaintiffs to prove to their satisfaction that Ashby, at the time of effecting the insurance, had not, and never had had, rupture; for that was one of the conditions upon which the policy had been granted. His Lordship proceeded through a laborious analysis of the evidence and dissection of the whole case, adverting to some of the most salient features, such as the first conviction of Dr. Kerr's mind, having once been strong it had perhaps become impossible to shake it by anything short of demonstration; the zealous leaning of the medical witnesses to the side which they had first taken up, their sitting by conferring with the counsel, instead of being away, as they ought to be, like the other witnesses, &c.; the great value of the testimony in such a cause of the operator himself, and of such unbiassed and skilful witnesses as Mr. Partridge, Mr. Coulson, and Mr. Calloway, all of whom he complimented most highly. The learned judge then proceeded over the whole evidence, with the aid of occasional observation and comment, placing the case in the most conspicuous and equable manner possible before the minds of the jury, to whose careful consideration he then committed it. The jury retired at verdict for plaintiff, thus reversing the former verdict.

MORTALITY TABLE,

For the Week ending July 18, 1846.

Causes of Death.	Total.	Average of 5 summers.	Average of 5 years.
ALL CAUSES	1053	898	968
SPECIFIED CAUSES	1050	892	961
Zymotic (or Epidemic, Endemic, and Contagious Diseases)	261	201	188
SPORADIC DISEASES—			
Dropsy, Cancer, and other Disease of uncertain or variable Seat	124	99	104
Diseases of the Brain, Spinal Marrow, Nerves and Senses	160	155	157
Diseases of the Lungs, and of the other Organs of Respiration	258	227	294
Diseases of the Heart and Blood-vessels	33	23	27
Diseases of the Stomach, Liver, and other Organs of Digestion	115	87	72
Diseases of the Kidneys, &c.	14	6	7
Childbirth, Diseases of the Uterus, &c.	11	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	11	6	7
Diseases of the Skin, Cellular Tissue, &c.	5	1	2
Old Age	35	52	67
Violence, Privation, Cold, and Intemperance	23	26	20

No. 357. SUMMARY. August 1.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF MEDICINE.

Meeting of July 21, 1846; M. ROCHE in the Chair.

THE PLAGUE.—In answer to the various orators who had successively attacked the *report* and its conclusions, M. Prus merely pointed out the contradictions existing in their statements, without bringing any new arguments forward in defence of his opinions.

HOTEL DIEU.

CLINICAL LECTURE BY PROFESSOR CHOMEL.

Intermittent Fever.

One of the most remarkable symptoms of intermittent fever, is undoubtedly the peculiar change of complexion observed in patients labouring under its effects. This change is a characteristic, earthy hue, quite distinct from the straw coloured shades of cancer, and accompanied by a sort of puffy state of the subcutaneous cellular tissue, which you will not meet with in carcinomatous subjects. When intermittent fever has prevailed for some time, the blood becomes impoverished, and souffle may be heard, as in anemia, at the first sound of the heart, and in the carotids, chiefly on the right side; you will also remark in most cases of chronic ague, a considerable enlargement of the spleen. A case was lately admitted into our wards, in which the organ descended two inches below the umbilicus and advanced so far below the false ribs, that it could be distinctly felt with the fingers, when the abdominal walls were placed in a state of relaxation. These points,—viz.: the alteration of the patient's complexion,—the abnormal sounds audible in the chief channels of circulation,—and the enlargement of the spleen taken into simultaneous consideration with the periodical attacks of fever, a description of which is needless in this place, are of the highest practical importance, not only for the diagnosis of the malady, but also for its effective treatment, a treatment which does not merely consist in arresting the progress of the fever with the sulphate of quinine, but also in the restoration to their functions, of the spleen and organs of circulation. It is almost always an easy thing to check the fever, but in a very great number of instances, the febrile attacks are only interrupted for a short time, and the organic lesion which originally gave rise to them still persisting,—their recurrency is inevitable.

We may add, that when enlargement of the spleen continues after the fever has ceased for some weeks, bark is of no further avail for the cure. In such cases, ferruginous preparations, when indicated by the anemic condition of the patient, have proved beneficial;—as to venesection and local depletion, they can only be injurious, although this method, combined with the exhibition of cinchona, has certainly been recommended as advantageous. We are of opinion that the cases benefited by this double method would have more rapidly and more safely been relieved by bark alone.

In most instances of intermittent fever, in which the paroxysms, but not the enlargement of the spleen, have yielded to the exhibition of quinine, the morbid hypertrophy of the viscus is extremely rebellious. Our predecessors were in the habit of recommending diaphoretics, laxatives, and vegetable diet; but the condition of success, the *sine quâ non*, is the removal of the patient from the noxious atmospheric influences which occasioned the disease.

In our opinion, the differences between the various forms of intermittent paroxysms of fever, have not hitherto been sufficiently taken into account. Many practitioners place a blind confidence in sulphate of quinine for the cure of all periodical fevers, and exhibit that remedy even in acknowledged cases of organic disease; it is far from unusual to meet with instances of consumption attended with evening feverishness, which the attendant physicians endeavour, need I say vainly, to subdue with quinine.

Essential intermittent fevers form a most remarkable order of diseases, inasmuch as they are perfectly distinct from all other maladies, and yet present in their symptomatic expression, points of contact with all other febrile conditions. They present a special type, are curable by a special method, and by their symptoms they may closely resemble almost all acute disorders. We also find that acute affections may under various circumstances assume an intermittent form. These observations shew, it is true in a feeble manner, the difficulties which may attend the diagnosis of ague, but at the same time point to the disease as a most interesting pathological manifestation. The existence of a specific cause to any disease necessarily points to a specific line of treatment: and this remark leads us to a point, which, at a future period, we will endeavour to develope before you, relative to epilepsy:—prizes and medals have been frequently proposed for the research and discovery of a cure for epilepsy. Now this appears to us an incomprehensible method of proceeding, because the causes of epilepsy are so very numerous, that it would be a sort of insanity to seek for a method of treatment applicable to all cases. It is not so, on the contrary, in diseases like rabies, and syphilis, which always acknowledge *one* cause, viz.: the introduction of a virus into the system. The specific of the latter, mercury, has long since been discovered, and analogy leads us to hope that for the treatment of the former, a specific drug may also be found.

HOPITAL DU MIDI.

CLINICAL LECTURE BY M. RICORD.

Gonorrhœa and Epididymitis.

With regard to the seat of gonorrhœa we may establish five degrees of the disease: in the first it occupies the balanic region; this is the most frequent. In the second, it invades also the spongy portion of the urethra up to the bulb; with the third, it extends to the membranous or muscular portion in the fourth the prostatic region is affected, and a fifth degree may be found in extension of the inflammation to the bladder itself.

In gonorrhœa of the balanic region, the glans is more tense,—the meatus injected, its lips puffed, and the urethra feels in the glans like a tightly drawn round cord. When the affection spreads to the spongy region, the discharge is less abundant than in the former variety; erections are attended with straining, but the organ is not bent, except when the cellular tissue surrounding the urethra, partaking of the inflammation, becomes deprived of its natural elasticity. When the membranous urethra is the seat of the disorder, it is in the perineum that pain is chiefly felt;—dysuria frequently complicates the malady, and a very troublesome sort of cramp, extending from the urethra to the scrotum. The inflammation accidentally spreads to a deeper region, the prostatic portion of the urethra, and the principal symptoms by which this occurrence is revealed, are vesical tenesmus, frequent, unsuccessful and imperious attempts to empty the bladder, and pains during defecation;—such are the special symptoms attendant upon each variety of acute gonorrhœa. Let us now examine its treatment.

In all cases in which the patient seeks advice during the first days of the existence of gonorrhœa, and previously to the establishment of well marked signs of acute inflammation, the surgeon should endeavour to check at once the progress of the disease; indeed we may lay down, as an invariable rule, that the abortive treatment should in every case be attempted, provided the structures surrounding the urethra be free from phlegmonous inflammation. The days are gone by when this treatment was supposed to be capable of producing strictures, which, it is now generally admitted, must be attributed entirely to the persistency of gonorrhœa and not to the methods of treatment successfully employed to arrest it.

The treatment I find most generally successful, is the exhibition of copaiba in capsules (6 to 12 daily), or cubebs, 1 to 2 ounces, together with one injection every day, containing from 10 to 15 grains of nitrate of silver to the ounce of distilled water. The injection should be as much as possible permitted to pass over the whole of the inflamed portions of the urethra, and therefore the patient should use no artificial means to guard against the imaginary evils attributed to the penetration of the injection into the bladder. If that penetration were possible, which the form and direction of the urethra permit us to doubt, the fluid would instantly be decomposed by its contact with the urine, and its passage over healthy portions of the mucous membrane, can do them no real injury. The combination of cubebs and copaiba in *one* preparation I reject, and prefer in all cases prescribing them separately, because if one fails in curing the gonorrhœa, the other remains as a precious therapeutical resource. If the abortive treatment prove unsuccessful, or if the acute symptoms of inflammation

have acquired a considerable degree of violence before the patient seeks advice, energetic antiphlogistic measures should be used before the exhibition of cubebs or injections. Baths, local depletion, and laxatives should then be employed, and when they have brought down the excitement in a great measure, the abortive treatment may be again resorted to.

Amongst the most troublesome complications of the first stage of gonorrhœa, we may mention dysuria; antiphlogistic treatment and local baths in luke-warm water, are usually sufficient to relieve it, but, occasionally, retention of urine is observed, and the surgeon is placed between the fear of injuring the urethra by the introduction of instruments, and the necessity of preventing over-distention of the bladder. In these embarrassing circumstances, we should first use every means to obtain evacuation of urine without recurring to the catheter,—such as leeches to the perineum,—cool lavements,—baths; but should the retention last more than 48 hours, a gum elastic catheter, of a middling size, and presenting a fixed curve, should be gently and cautiously passed in, and in most cases withdrawn after the operation.

Abscesses often form in the vicinity of the urethra; these should be opened at an extremely early period, in order to prevent the establishment of urinary fistula. We have also mentioned vesical tenesmus as a frequent complication, indeed, as a common sign of deep seated blenorrhagia; it is removed readily by a very simple method, consisting of the injection into the rectum of 4 ounces of cold water, with the addition of 15 or 20 drops of laudanum. When gonorrhœa is on its decline, great benefit may be derived from the following injection twice or three times a day:—R. aq. destill. rosar. ℥viij. Zinci sulphatis, plumbi s. acetat. aa. ℈j. m.

In chronic gleet it is of extreme importance to ascertain the cause to which the persistency of the discharge is due. The urethra should be carefully examined in order to discover any thickening or stricture of the canal; if none be found, astringent injections with wine, tannin, alum, iodide of iron (2 to 4 grains to ℥viii) will generally be found beneficial. In rebellious gleet, injections with copaiba or cubebs, have been recommended, but we cannot say we have ever found them useful.

Epididymitis.—It is exceedingly uncommon to meet with this complication before the third week of the existence of gonorrhœa; this remark acquires great importance, when it is coupled with the observation that few gonorrhœas resist the abortive treatment when properly applied: that treatment of the discharge becomes, therefore, the best prophylaxis of hernia humoralis. The left testis is frequently more frequently affected than the right, a circumstance which has been attributed to the passage of the sigmoid flexure of the colon over the spermatic veins; to the greater relaxation of the left side of the scrotum; and which appears to me to be promoted by the general habit of wearing the trousers on the right side of the scrotum. The custom of carrying a suspensory bandage is an excellent precaution which should by no means be neglected. In most cases the urethral inflammation is propagated along the vas deferens to the epididymis, and the swollen tube may be distinctly felt; in others, the inflammation seems to have been induced by sympathetic action, the vas deferens appearing to have no share whatever in its passage from the urethra to the testis. Orchitis is always in these cases preceded by epididymitis, and effusion of serum in the tunica vaginalis frequently accompanies the development of testicular inflammation. It is of great importance to distinguish epididymitis from true orchitis; their treatment, and particularly their prognosis being widely different. In the former the epididymis alone is hard, the testis preserving its natural elasticity; in the second, on the contrary, the issue of which is almost invariably fatal to the functions of the gland, the resiliency of the testis is exchanged for a dull hardness, as if it were *coagulated* by inflammation; the skin adheres to the swelling, is smooth, and deprived of the folds and wrinkles special to the region.

HOPITAL BEAUJON.

Case.—*Dislocation of the Astragalus.*

M. Robert.

F. B., Œtat. 22, fell on the 1st of July from a height of 20 feet, the ladder on the summit of which he was working, having given away under him. The patient's feet were engaged in the rounds of the ladder and the left was displaced, the sole being turned completely outwards. Reduction having been ineffectually attempted, the patient was sent to Paris, and admitted into hospital Beaujon on the 15th of July, 1846. On examination, the displacement presented the following appearances: the external edge of the foot was turned upwards, and the sole outwards; the external malleolus, concealed between the two articular surfaces of the os calcis, could not be felt; internally, in front of the internal malleolus, was a swelling, due to the presence of the astragalus, the head and inner edge of which were distinctly recognised. In the deep groove, by which are separated the two inferior articular surfaces of the astragalus, was engaged the process of the os calcis. Removal of the astragalus was determined upon, and accordingly the bone was laid bare by a crucial incision; great efforts of extraction were then employed, and only with partial success. The ligaments were, after the astragalus had been slightly moved, divided, and the bone was then extracted. But after the operation, the restoration of the foot to its proper position was not so easy as had been anticipated, the difficulty being due to the relative position of the external malleolus and os calcis. In order to liberate the malleolus, which had not been fractured, the foot was carried still more outwards, and replaced after having previously been pushed downwards. Continuous irrigations with cold water were prescribed on the joint, and three grains of extract of opium; on the second day the patient became slightly feverish, but the local condition of the foot has been daily improving. The cold applications have been continued to this day, July 25, and the patient is doing well.

Dan. McCarthy, D.M.P.

Scotland.

Typhoid Fever.—A paper, read by Dr. Christison to the Edinburgh Medico-Chirurgical Society, on a typhoid fever, apparently originating in local miasma, is reported in the *Monthly Journal of Medical Science*. Dr. Christison admits the possibility that continued fever may originate simply in exposure to the effluvia of organic decay, and proceeds to draw deductions from this fact. One of the most obvious of these deductions is, that continued fever may show itself with the characters of an endemic or epidemic in localities extremely circumscribed. This has frequently occurred, and has, in some cases, given rise to suspicions of poisoning, from the exceeding virulence and circumscribed action of the local miasm; and experience shows, that events of this kind might frequently have been easily explained, had their observers been aware of the liability of fever to arise from the insidious emanations of concealed organic matter in a state of decay. Dr. Christison was led to make those remarks by a remarkable incident which lately excited a strong sensation in the neighbourhood where it occurred, and which went the round of the newspapers at the time, as a mysterious circumstance. In a thinly-peopled rural district of Peeblesshire, Mrs. W., the wife of an extensive farmer there, was attacked on the 22nd of January, with rigors, general prostration of strength, with great disinclination for food, to which vomiting was added five or six days afterwards. On the 30th of January she was visited by Dr. Macnab, who found her complaining of rigors, pains in the back and limbs, headache, slight intolerance of light, sore throat, and dryness of the mouth, a painful sense of palpitation along the course of the descending aorta, nausea, with occasional fits of vomiting, thirst, want of sleep, total loss of appetite, and great exhaustion. Her pulse was 92 and feeble, tongue covered with a very thick brownish yellow fur, the back of the throat red, the vomited matter partly mucus, partly bile, bowels constipated, evacuations dark and offensive, and the urine unusually yellow as if bilious. She had anxious expression of countenance, with suffused eyes; the temperature of the body was lower than natural, there was no pain in the epigastrium or either hypochondriac region. She gradually recovered under the use of laxatives, and diaphoretics. On the 9th of February, she was able to take food with relish, and had lost the tendency to vomit for some days, so that Dr. Macnab left her as convalescent. On the 13th, Dr. Macnab called to enquire for her, and to his surprise found her labouring under all her former symptoms in an aggravated form. The thirst was intense, nausea and vomiting very troublesome, pulse 100, intermitting, small, and very feeble; the tongue covered with a thick, dry, yellowish brown coating, the bowels very constipated, and the evacuations dark, bilious, and fœtid. The vessels of the conjunctiva much injected. There was no pain in the abdomen, and no appearance of petechiæ anywhere, nor any wandering of intellect. The remedies formerly of service produced no effect, and the symptoms went on speedily increasing in severity until the 19th, when, for the first time, she became incoherent, and on the same evening she died. No post mortem examination was permitted, but the body after death presented externally an emaciated appearance, and a peculiar yellowish colour. The patient was seventy years of age. On the 25th of January, Mr. W., a hale old man of seventy, the husband of the first patient, was attacked in a precisely similar manner. The disease took exactly the same course; the same relapse took place, and on the 18th of February he died. The body after death presented the same appearances, and speedily began to decay. The servant, Isabella M., also was attacked on the 26th of January, in precisely the same manner as in the previous cases. In her case, however, no abatement of the disease was produced by treatment; her strength was quickly exhausted, and she died on the afternoon of the 1st of February. Death was in this case preceded for twenty-four hours by delirium and stupor. The body presented the same external appearances. These were the only fatal cases; but in addition to them twelve other persons were more or less severely attacked with similar symptoms, and three or four others were more slightly affected. There were fifteen people either residing in the house, or much in it, during the day, and every one of these was so seriously affected as to be obliged to give up work, and to require medical assistance. Three or four others, who were only occasional visitors, were more slightly attacked, and two or three visitors who were in the house after Mr. W. was taken ill, all remarked that they were sick and uneasy in their stomachs. Of the fifteen frequenters of the house, who were attacked, all were seized within 14 days after the first case occurred. Two of these cases, those of Miss W. and Mr. J. W., were seen by Dr. Christison. That of Miss W. was remarkable from her having returned from the Isle of Skye (where she had resided at least three months) three days before the first case occurred. In nine days she was attacked with the same symptoms as the rest, and suffered severely. Dr. Christison was struck with the physiognomy of the diseases, as presenting something very different from that of ordinary infectious typhus of the same stage—the countenance being pale, the eye lively, the expression natural, and by no means oppressed; the mind clear and alert, and the strength, far from so prostrate as it was usually observed, in early convalescence from the late epidemic typhus. The disease attacked most severely all those, without exception, who resided night and day in the farm house. And the slightest forms of the disease occurred among the farm servants; who, though much in the farm house during the day, slept in their cottages, a few hundred yards off. No fewer than eighty-nine of the sick lay ill in cottages inhabited by other members of their families, without a single case of propagation of the disease having been observed in those localities. The farm house is situated near the confluence of the Line and Tarth, which both flow through rather open valleys, bounded by pastoral hills, rising about a thousand feet. There is but little wood within a mile of the house. The country is generally drained and dry, but to the westward, the fields on the north branch of the Tarth are irrigated with river water, the nearest point of these meadows being half a

mile from the house. The population of the district is purely rural, and very thinly scattered; and the only town within easy reach is that of Peebles, about seven miles distant. Suspicions of poison having occurred, Dr. Christison was consulted by the authorities. At first he suspected that the disease might have arisen from the use of diseased meat; but poisoning by diseased meat causes diarrhœa, and here constipation was present. Besides, no instance of natural death had occurred among the cattle of the farm for a very long period, and all the food consumed, was supplied by the farmer. Ordinary poisons were deemed out of the question—none had been seen about the farm for years; and several of the parties affected had never taken either food or drink on the premises, although in the house a considerable portion of the day. Besides, what poison produces such effects? A general endemic influence, or malaria, was inadmissible; neither the irrigated meadows, nor any other general cause could produce such a malaria as would fall with special virulence on the one house in question, and yet entirely spare all others in the valley. The want of resemblance to ordinary epidemic or infectious fever struck Dr. Christison's attention as something very remarkable, the disease was a typhoid fever, but yet not the typhus with which he was familiar. A local malaria was therefore the only conceivable cause left for consideration, no source of this, however, was known. Dr. Christison happening to be acquainted with the locality, recollected that the farmstead was situated on a rising slope behind the house; he therefore suggested that the drains might be defective, and that the soil around, and probably even under the house was bad, in consequence of becoming impregnated with decaying animal matter. Dr. Macnab made, accordingly, a searching investigation into the state of the drains and sewers at the farmhouse, and found them all closed up and obstructed with the accumulated filth proceeding from the privies and the farm yard. Dr. Macnab stated that the effluvia proceeding from these sources was very offensive, and was diffused through the atmosphere to a considerable distance around. Dr. Christison concludes, therefore, that the origin of this at first incomprehensible disease was at last explained, and recommends the circumstance to the attention of rural practitioners, as a probable explanation of the cases of fever frequently affecting numerous individuals in a circumscribed locality.

SUICIDE BY PRUSSIC ACID.—A case of suicide by Prussic Acid, read before the Medico-Chirurgical Society of Glasgow, is reported in the *Monthly Journal of Medical Science*. A gentleman, aged about forty-five, called at a tavern he was in the habit of frequenting, complained of being faint and asked to rest in another room, and to have a glass of water. He appeared agitated, and breathed somewhat laboriously. On being shown into a room he took his place, in a reclining position, on the end of a sofa, and a tumbler three parts full of water was placed on a table at his right side. He was not left alone for an hour after this, as there was a party drinking in the same room and the attendants entered it frequently. An hour afterwards all the glasses were removed with the exception of the tumbler of water which had been given to him, the door of the apartment was shut and he was left alone, occupying a similar position on the sofa to that already mentioned, breathing heavily, as if asleep. Three quarters of an hour elapsed before any one entered the room, when he was found in the same position, but sitting more erect, his head leaning forward, his arms lying easily by his sides and quite motionless. Dr. Fleming saw him in less than five minutes and found him quite dead, stretched on his back on the sofa. There was not the slightest action of the heart or lungs and from the coldness of the face, forehead, and hands, Dr. Fleming inferred that he had been dead half an hour. His features had a remarkably composed expression as if he had died easily, his lips had some colour, his jaws were closed, eyelids quite shut, the cornea prominent and glistening, and pupils half dilated; on opening a vein no blood flowed. Dr. Fleming found on examining his person, in the trousers pocket of the left side, a half ounce vial, *loosely corked*, labelled prussic acid, having a strong odour of that liquid, and wet as if recently emptied. The characteristic odour could not, however, be detected in the room, or at the mouth of the deceased. A small quantity of *water* had been spilled on the floor close to the sofa, and neither this nor the water in the tumbler had the slightest taste or smell of prussic acid, and the tumbler was said to be nearly as full as when given to him. On post mortem examination the odour of prussic acid was not detegible in the brain or blood flowing from it. The brain was much congested, and the ventricles contained serum. On opening the thorax and abdomen, the distinctive odour was strongly perceptible, even to the peculiar acrid sensation produced on the fauces. The pericardium contained six drachms of serum. The heart was of a natural size, but there was concentric hypertrophy of the left ventricle to a great extent; in other respects this organ was sound; all its cavities were perfectly empty and as clean and free from blood as if they had been washed. The aorta and larger arteries were also quite empty and flaccid. The veins were distended with blood, which was unusually dark coloured and perfectly fluid, the stomach presented no unusual appearances, and was preserved with its contents; the liver was enlarged, hard, and mottled, of a grey colour, and by no means loaded with blood; the spleen was large, soft, and engorged; the kidneys highly congested; the peritoneal covering of the intestines presented a reddish tint; the bladder contained above six ounces of urine; the contents of the stomach, when tested, showed the presence of prussic acid. It was ascertained that the deceased had procured half an ounce of prussic acid about a quarter an hour before calling at the tavern; the no odour of the acid perceptible in the or about his person within an hour after he had taken it, which would most likely have been the case had any of it been spilled, and the bottle was quite empty, therefore, Dr. Fleming concludes that the whole was taken. On analysis of some acid taken from the same bottle as that the deceased obtained the dose he took from, it was found to contain eight grains of pure acid in half an ounce. The scream was not heard in the present case, although several persons were in the adjoining room. There was found a considerable quantity of food, consisting of half digested animal food, bread, and apparently malt liquor (about eighteen ounces in all) in the stomach.

England.

The following are the only articles of interest to the profession in the last number of the *Lancet*.

JAUNDICE FROM AN ENCEPHALOID TUMOUR OBSTRUCTING THE HEPATIC DUCT.—Dr Ormerod relates the case of a female, aged 27, who was admitted into Bartholomew's hospital under the care of Dr. Burrows. When admitted her expression of countenance was dull and heavy; her conjunctivæ and skin generally of an intensely deep, jaundiced hue; pulse 96, full, and soft; tongue dry, and brown down the centre, pale at the edges; gums spongy, soft, and bleeding at the least touch. Bowels relaxed; the motions containing much blood. Abdomen full, soft, intolerant of severe pressure, which caused much pain in the right hypochondrium; urine abundant and high-coloured; had jaundice for three months, with drowsiness, weakness, and violent hæmorrhage from the mouth, nose, and alimentary canal. She was married and temperate; had always had delicate health, the catamenia having never been properly established. Three months before admission, she had a fall, which alarmed her a good deal and the next morning, the surface of the body had become jaundiced. Nine days ago, she had a rigor, followed by reaction; and from that time she had had oozing of blood from the gums, with epistaxis the day before admission, to a large amount. The alvine evacuations were at first clay-coloured, but had latterly been much darker. She had been treated by purgatives. On her admission into the hospital she was ordered five grains of calomel. During the night she was restless, constantly moaning. Bowels open several times, motions of pure blood; pulse 116, feeble; extremities cold; tongue dry, and brown. She was drowsy, but quite intelligent when roused. She gradually became comatose,—pulse 114, more and more feeble,—and died in the course of the afternoon, having passed a large quantity of blood in the bed just before death. The body was examined twenty hours after death: it was much loaded with fat; the limbs were rigid, the blood generally was fluid. Brain not examined. Lungs small, collapsed; tissues stained with bile. Heart small, and generally healthy: the right side of the pericardial surface of the right auricle crusted over with little dots of coagulable lymph, the remains of pericarditis. The stomach full of bloody mucus; mucous membrane generally *mamellonnée*, but in other respects healthy. Intestines, both small and large, full of dark fluid blood; their coats emphysematous in parts, and stained by the bloody fluid; in other parts, this discoloration was confined to the valvulæ conniventes, which, throughout the whole length of the canal, were much loaded with blood. In the duodenum was a soft, round mass, about the size of a walnut shell, white and pulpy, growing from, and apparently quite obliterating, the orifice of the common duct. The liver was large, reaching up to the third rib, of a dark, dirty-green colour; beyond this, the only thing to be remarked was the enormous size of the ductus cysticus and ductus communis choledochus, either of which readily admitted the little finger. The gall-bladder was healthy, being full of fluid bile; the pancreas and pancreatic duct presented nothing abnormal. The kidneys were natural in size, pale, yellow, beset with numerous small red ecchymoses; their structure was apparently healthy. The blood was fluid, while the rigor mortis was marked as usual.

ANEURISM OF THE ABDOMINAL AORTA.—Mr Cousins reports the case of a man, aged 66, admitted into the University College Hospital under the care of Dr Taylor; he was of short stature, lymphatic temperament, a smith by occupation; he had suffered occasionally from rheumatism, having on two occasions experienced severe attacks. Eighteen months before admission, he felt, shortly after dining, a severe pain at the crest of the right ilium, which in a few days became so severe, that he was unable to stoop or to dress or undress himself. This pain became of a constant gnawing character, and continued up to the time of his admission. It was much increased when he drew his breath. About five months ago, whilst employed on a large bar of iron, he threw back his head to see if the bar was straight, and he then felt a sharp pricking pain at the upper part of his abdomen, for a moment only. At bedtime he found in this position a rather hard spot, of the size of a dollar, which was not painful. He did not notice any pulsation for a month from this time, and it was then scarcely perceptible. The tumour increased with rapidity, and he lost strength; He had left his work nine weeks, and had been confined to his bed five weeks. For some time past he had been shivered in the evening; he was weak, and considerably emaciated, no anasarca. He could lie only on his back, with his knees drawn up; decubitus on either side gave increased pain in the back; countenance rather anxious; complexion sallow no lividity seen anywhere; tongue moist and furred in the centre; slight nausea after taking food; no tenderness at the epigastrium; the abdomen small and supple, and the walls thin. There was a globular tumour at the epigastrium, reaching nearly to the umbilicus, rising an inch and a half above the general level of the walls of the abdomen, at least four inches in diameter, and pulsating visi-

bly. There was not the least murmur in the tumour, nor in the course of the aorta, above or below it, and the tumour moved when he changed his position. Pressure over it, caused acute pain, felt about the right crista ilii, and a pricking pain in the tumour itself, which was otherwise free from pain. A continual aching pain, preventing him from sleeping, was complained of over the right half of the sacrum, and the adjacent part of the right ilium, not increased by pressure over those spots, but augmented by moving in bed. There was a slight pulsation on the left side of the spine in the lower part of the dorsal region, but no murmur. Pulse 66, moderately full, firm, and regular; of the heart's sounds, the first and the impulse scarcely perceptible, the second sound moderate; bowels costive, very irregular since he has been ill, sometimes not moved for a period of eight days. The patient, after nine days residence in the hospital, during which he continued in the same condition, died suddenly in the morning. On examination after death, the tumour in the epigastrium was found to have quite subsided. The face and lips were quite blanched. In the cavity of the abdomen there were twenty-one ounces of coagulum and forty-one ounces of serum of blood. The aneurism was of the size of the coagulum and bounded behind by the vertebral column; the bodies of the first and second lumbar vertebræ were much diseased on their left side; the duodenum was strongly adherent to the sac. The opening of the aorta into the upper part of the aneurism admitted the points of two fingers, and the artery was larger a little above this; the opening from the aneurism below, and the artery itself, were much narrowed; this opening was situated about two inches above the bifurcation of the aorta, the dilatation beginning immediately below the renal arteries. The coats of the vessel which composed the sac were not much thickened; there was a coloured fibrinous deposit on the internal surface in front, towards the left part; near the inferior part was an opening into the sac of nearly the size of a halfpenny; the edges had a lacerated appearance, and the walls were thinned at this part. Under the lining membrane of the aorta was a deposit of calcareous and atheromatous matter. The arteries at the base of the brain were all more or less diseased, especially the basilar artery; the surface of the kidneys rough texture rather dense and mottled; cortical part not atrophied; the spleen very soft. Intestines throughout very pale. Heart: weight, twelve ounces; pulmonary valves allowed a little regurgitation; the aorta admitted the points of three fingers, and was larger than the pulmonary artery; the right ventricle and auricle empty, ventricle rather small, but otherwise healthy; the left ventricle contracted; the walls thicker than usual; substance pale; some spots on mitral valve; orifice of natural size; valves slightly thickened: left auricle quite natural. The lungs contained scarcely any serum or blood. The other organs presented no appearances worthy of note.

Aneurism of the Femoral and Popliteal Arteries.—Mr Hawkins reports the case of a man, aged 30, of thin, sallow, unhealthy appearance, who became a patient in the Cheltenham Hospital, in consequence of Aneurism. About three years before seeking advice, this patient noticed a swelling, the size of a bantam's egg, in the ham, to which his attention was attracted by a sharp pain. After three years (in July 1839) he sought advice, when there were discovered two pulsating tumours in the left lower extremity, one of the size of a duck's-egg, about five inches below Poupart's ligament, the other, the size of a lemon situated in the ham. On several occasions he had had hæmoptysis, but, according to his own statement, not to an alarming extent. The sounds of the heart, heard all over the chest, considerably obscured the respiratory murmur; the breathing was hurried, and he had slight cough; pulse full and bounding, always above 100. Under these circumstances, an operation was considered inadvisable. On the 31st. of August, he was again seen. The tumour in the thigh had remained stationary. The swelling in the ham had increased considerably; the pulsations had ceased, and the integuments covering it were of livid colour; the pain in the limb was so great as to deprive him of rest. Pulse 120. He was immediately admitted into the hospital, kept in bed, and, from fear of hæmorrhage, a tourniquet was placed over the femoral artery, just below the upper swelling. The next day the dark livid discoloration of the integuments was more extensive; there was obvious danger of immediate hæmorrhage, and on the following day (September 2nd) the external iliac artery was tied in the usual manner. The moment the ligature was tightened, all pulsation ceased, and the patient complained of pain in the limb. The edges of the wound were brought together by sutures; a light compress and bandage were applied, and flannel was rolled round the limb. About three ounces of blood were lost during the operation. Towards evening he complained of pain and numbness in the limb; the temperature, however, was natural pulse; 120. On the sixth day after the operation, both the femoral and the popliteal tumours had much diminished in size; the limb was cold; the foot livid. The wound made at the operation had in great part united. On the eighth day, the tongue was brown and dry; respiration hurried; eyes glassy, and the look vacant; pulse 120. A slough had formed upon the buttock. The day after the foot had mortified, and a large slough had formed in the popliteal space The discharge from the limb became extremely fœtid and on the 29th day after the operation the patient died On *post mortem* examination the pleuræ were found firmly adherent on the right side. The left ventricle of the heart was dilated as far as the commencement of the aorta. Abdominal viscera healthy. The ligature had been applied an inch from the origin of the epigastric artery. A firm plug was formed within the external iliac artery, both above and below the ligature. The femoral aneurism was carefully dissected out. At the lower part of the sac, the femoral artery divided into two branches of equal size; one communicated with the sac of the femoral aneurism, the other ran over the sac, and communicated with the popliteal aneurism, which had been destroyed by sloughing.

Epilepsy.—Mr Charles Gibb, house-pupil to the Newcastle Infirmary, reports the case of a sailor, aged 36, who was first attacked by epilepsy 18 months before, without apparent cause; he had considerable vertigo, but no pain; dim, wavering eye-sight, with slightly contracted but sensitive pupils; tinnitus aurium; a compressible slow pulse, and regular bowels. After the first fit he had a little vertigo, and was bled, but continued pretty well for six months. She... without cause, the fits returned with scarcely any intermission, for nine days. During this period he was often bled, and he remained unwell afterwards for six months; was again attacked two days before admission into the infirmary; had three severe fits; had been bled and purged. He was cupped and purged, and mercury was administered so as to affect his gums slightly; leeches were also applied to the septum nasi twice a week. This treatment was continued during a month without benefit. The patient was then ordered half a grain of nitrate of silver thrice a day with purgatives. Some little benefit arose from this change; as the fits returned however, and the patient complained of weakness, he was ordered "*to omit medicines and have nourishing diet, with* ONE OF THE HAGUE POWDERS FOR EPILEPSY *twice a day, and an aperient injection occasionally.*" This treatment was continued for a fortnight, leeches being once during that time applied round the anus. At the end of this time a syphilitic taint was suspected in consequence of pains in the shin bones. Blue pill, iodide of potassium and sarsaparilla were therefore resorted to. Under this treatment he improved and was dismissed.

*** We cannot too strongly reprobate the countenance given to quackery, by the mention, without strong protest, in a medical journal, of the above named notorious nostrum, as having been prescribed at a large infirmary and by a medical practitioner of some standing.

Land Scurvy.—Dr. M'Cormack relates a case, which he considers to be Land Scurvy, produced by eating diseased potatoes, and which Dr. M'Cormack states, he has every reason to believe is very prevalent. The patient was a girl, aged 16, who was said by her mother to have taken "the complaint that was going through the country." The father described the disease also as having commenced with a pain in two of her front teeth, producing great swelling of the gums, and afterwards enormous swelling of the head. The patient was a factory-girl in a flax-mill, where she was exposed to great and sudden changes of temperature, also to great fatigue; the heat of the mill was so intense that her clothes were always saturated with perspiration. Her hours of work were from half-past five in the morning till past seven in the evening. From the extreme wretchedness of the family, her food had been of the most scanty and unwholesome nature, the potatoes they used being all more or less diseased, and milk being an article of diet they had not been able to indulge in for months. She had complained, for about fourteen days, of a pain in two of her front teeth, which was of so acute a character as to preclude sleep at night, and which caused equally intense suffering during the day; also of chilliness, and disinclination to move or exert herself; but still she struggled against the disease, as both herself and her family were dependent for livelihood on her earnings; and she continued going to the factory until eight days before Dr. M'Cormack saw her, when she was unable to quit her bed from excruciating pain in all her joints, and in the small of her back, and burning heat of skin. She had not slept for several nights, during which, her mother said, she raved incessantly; had not been able to eat any food for four days, from the soreness of her gums, mouth, and throat; had felt a sense of weight, accompanied with pain, in the region of the heart; palpitation was excited by the slightest movement, and there was a general muscular soreness over the whole body. The pain in her teeth was excessive, there was no appearance of caries in any; the gums, especially of the lower jaw, were swollen, painful, spongy, and bled on the slightest touch; even the attempt to swallow caused an oozing of blood. On examination, the teeth were found to be loose, and extremely painful; fauces and mouth inflamed, and ulcerated in patches; tongue flabby, and thickly loaded with white fur; breath horribly fœtid; great difficulty in swallowing; pulse 130, small and feeble; muscular pains excruciating; joints swollen and very painful; skin over the whole body tense, tumefied and of a preternaturally dark colour; vibices scattered over the limbs: great prostration and despondency; constant involuntary sighing; face and head enormously swollen; countenance pallid, unmeaning, and indicating indifference of her fate; no sleep, from the pains of the joints. The bowels had been obstinately constipated for several days, and her mother had given her a dose of senna and salts the evacuations caused by which brought on such extreme exhaustion, that she had several fainting fits in rapid succession. Urine scanty and high-coloured; the belly hard and dropsical; heat of skin intense; the two teeth in which the pain commenced had split in two perpendicularly. Dr. M'Cormack states, that as the poverty of the girl's parents prevented her obtaining the only remedies from which she could derive benefit,—an improved diet and regimen, she continued to get gradually worse. Dr. M'Cormack has also since met with a similar case, in a milder form, occurring in a very delicate female, aged 19, exposed to cold, hardship, great fatigue, and want of proper nourishment. This patient was attacked with sudden prostration of strength, fainting, acute pain in the abdomen, excruciating muscular and articular pains, especially attacking the neck, shoulders, and back; the skin so sore that the slightest touch caused her to cry out. She was unable even to turn in the bed; bowels confined, urine scanty and high-coloured; pulse 130, small and feeble; great heat of skin; tongue loaded; breath fœtid; face and head enormously swollen; became flushed several times in the day, and pallid afterwards; great despondency, and headache. She continued in this state for five days, when she complained of her teeth being so loose that she could not eat; the mouth was sore; gums spongy; and bleeding on the slightest touch. She was improving gradually under a generous diet, with bitters, such as quinine, compound decoction of gentian, &c.

Asphyxia Idiopathica.—Mr. Robins relates the case of a young woman, aged 19, who had been married only a few weeks, to whom he was called about half-past five in the morning of the 30th of December, 1845. He found her in her night-dress, in bed, lying on her back, with the arms extended on either side, her head being supported by her mother-in-law. The skin was still warm, and rather moist; the eyelids were partially closed, and the pupils dilated; the lips were nearly in apposition, appeared rather swollen, and bluish, and there was a little white froth between them. The legs were nearly in contact, and lying straight down the bed. The external appearance of the body was pale, and there was no mark of violence on any part of it. The bedclothes were not in confusion, and there were no stains on the pillows. On looking about the room, nothing of a poisonous nature was discoverable. As far as Mr. Robins could learn from her friends, the patient had always been in good health, though occasionally subject to fainting fits, and a feeling of flatulency. She had been in service nearly up to the time of her marriage, and a surgeon with whom she had recently lived nearly twelve months, stated, that during that time she had never complained of bodily illness. Mr. Robins had seen her for the first time, three weeks after her marriage, in conse-

quence of slight sickness, headache, and pain in the loins; she had passed one of her usual periods of menstruation without having seen anything. An inquest was held on the body, and a post-mortem examination made 33 hours after death. The skin of the anterior parts of the body was very pale, that of the posterior dark-coloured. The body generally was plump and well formed. There was no appearance of bruise or other external injury. A slight white froth still existed between the lips. On cutting through the skin, there was a considerable layer of fat, and the muscles were red and well developed. On opening the cavity of the abdomen, the external appearance of the organs was that of perfect health. There was nearly a pint of serous fluid in this cavity. On removing the sternum and ribs, the contents of the chest presented the same healthy appearance as the abdominal organs. There were about three ounces of fluid in the right pleura, and about half that quantity in the left. On opening the pericardium, nearly two ounces of fluid were found in it. The heart itself presented a very healthy appearance, but it was very soft, and of small size. On cutting into its right half, both the ventricle and the auricle were found exceedingly thin, and Mr. Robins considered the ventricle dilated; only a small quantity of blood escaped from either cavity. The left side was quite empty, as was the aorta for some distance, but both ventricle and auricle were perfectly healthy; so were the valves on both sides of the heart, as well as the large vessels. On examining the lungs, they were found considerably engorged with black blood, but there was no other appearance of disease in their structure. Mr. Robins ligatured the two extremities of the stomach, and removed it from the body for further examination. It contained less than two ounces of rather thick fluid, of a reddish colour, which was preserved. On laying open this organ, he found the mucous membrane of a large portion of the smaller curvature, as well anteriorly as posteriorly, of a deep-red or purple colour, which did not terminate abruptly; but the other parts were nearly natural in appearance, and both the cardiac and pyloric openings were quite healthy. The duodenum and first portion of the small intestine appeared congested, but the bowels generally were free from any morbid appearance, and were nearly empty. The spleen was very much engorged; the liver, also, much beyond its usual size, but its structure seemed healthy, and the gall-bladder was half filled with healthy bile. The kidneys, especially the right, were large from congestion, but they were healthy in structure, and so was the bladder, which was empty. The uterus was enlarged from pregnancy, which, in the opinions of Mr. Newport and Mr. Girdwood, had advanced to the ninth week. There was a sore on the right labium, nearly as large as a sixpence. On removing the skull-cap, about two ounces of fluid black blood escaped, most probably from a rupture of the sinuses, for these were afterwards found empty. The veins of the dura mater were congested, so also were those of the brain itself; for, in cutting across its substance, a great many dark spots were seen; but after carefully examining every portion, no other unnatural appearance was found. The stomach and its contents were taken away for further examination. No improper substance was found, however, on analysis. At the inquest, the following facts appeared in evidence:—That she had been married only ten weeks. That she appeared in her usual good health, with the exception of occasional morning sickness, up to the evening preceding her death, when she felt a little faint, and complained of a swelling of the right leg below the knee. She, however, ate heartily at tea-time, and had some brandy in her tea, to relieve the faintness. She had the leg rubbed with hartshorn oil: she also took two common aperient pills between nine and ten o'clock, and went to bed with her husband in good spirits. The brothers slept in a room adjoining, and one of them, who did not get home till twelve o'clock, had occasion to speak, on his return, to the husband of deceased, and as he could not awake him, the deceased said, laughingly, "Tickle him up." She then appeared quite well. She had frequent occasion to get out of bed, from the action of the pills; and soon after five o'clock her husband said he was awoke by a noise, which he found to arise from her having fallen down by the side of the bed. He lifted her in, and called his brothers; she told one of them to go for his mother, as she was very ill. He said she looked very pale, and asked for a glass of water, but when it was offered to her she did not take it. Almost directly after this, her husband said, she gave three loud screams, and after that never spoke. The distance to the mother's was but short, but before her arrival she was dead. The inquest was adjourned, and a re-examination of the body instituted, the appearances of the pharynx and œsophagus being particularly noticed. No trace of disease appeared in the trachea, and the bronchial tubes contained a little frothy mucus only, which was not bloody; the whole of the blood in the body was black and fluid. Mr. Robins therefore concluded that idiopathic asphyxia was the cause of death, and a verdict of death from natural causes was returned.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON PRACTICAL MIDWIFERY.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

Delivered last session at Bartholomew's Hospital, and revised by the Professor for the "Medical Times."

SPURIOUS PAINS AND TREATMENT OF LABOUR.

At our last meeting, gentlemen, I described to you the process of natural labour; it now remains for me to say a few words on the spurious pains to which, at the commencement of labour, many women are subject. The procursory pains of labour are liable to be perverted by many circumstances, and their diagnosis from the true uterine contractions of early labour is a matter oftentimes sufficiently puzzling to the young practitioner. Costiveness is one of the most frequent causes which give rise to the *dolores spurii* as they are called; in fact any irritation in the primæ viæ soon communicates itself to the uterus, and deranges its action. Plethora is also a cause, for the uterus is so much engorged that its action is impeded, and in some cases a state bordering on inflammation is induced. Spurious labour pains are not unfrequently of a rheumatic character, and when this is the case they are productive of much suffering to the patient, although the uterine contraction may be so trifling as not to produce any perceptible effect on the os. Rheumatic pains of this nature are commonly produced by exposure to damp and cold, in common with the other forms of rheumatism, and are generally connected more or less with bilious and gastric derangement. As I before said, these pains are not always easy of diagnosis, but it is of considerable importance to ascertain certainly their presence. You will recollect I told you that genuine labour pains come on at regular intervals, and rise by degrees to a certain degree of intensity and then gradually subside; the earlier pains are situated in the back and loins, and are of a dull aching character; the fundus, and os uteri are perceptibly affected by them, the fundus becoming hard and firm, and the os tense; the spurious pains on the contrary come on suddenly and at irregular intervals; they are of a sharp twinging character; are felt in the abdomen, and produce little or no effect on the os and fundus of the uterus. By stethoscopic examination you have safe means of diagnosis. On this subject Dr. Hohl says, "If we direct our attention to the changes of tone which the uterine pulsations present during auscultation, we shall find them generally stronger, more distinct and varied in tone during labour: and this is especially the case just before a pain comes on; even if the patient wish to conceal her pains, this phenomenon, and more especially the rapidity of the beats, would enable us to ascertain the truth. The moment a pain begins, and even before the patient herself is aware of it, we hear a sudden short rushing sound which appears to proceed from the liquor amni, and to be partly produced by the movement of the child, which seems to anticipate the coming on of the contraction; nearly at the same moment all the tones of the uterine pulsations become stronger; other tones which have not been heard before, and which are of a piping resonant character, now become audible and seem to vibrate through the stethoscope like the sound of a string which has been struck and drawn tighter while in the act of vibrating. The whole tone of the uterine circulation rises in point of pitch. Shortly after this, viz:—as the pain becomes stronger and more general, the uterine sound seems as if it were to become more and more distant, till at length it becomes very dull and altogether inaudible. But as soon as the pain has reached its height and gradually declines, the sound is again heard, as full as at the beginning of the pain, and resumes its former tone, which in the intervals between the pains, is as it was during pregnancy, except being somewhat louder. This is the course of things if the pain be a true one, and attain its full intensity; when the pains are false or irregular, it is very different; the uterine sound either remains unaltered or increases only for an instant, or its seeming increase of distance as above mentioned, is not observed." I have been in the habit of comparing the sound of the uterine circulation, to that produced by a stone thrown obliquely over a smooth piece of ice, which flying along in a succession of bounds, produces a sharp twanging sound each time that it strikes the ice. The treatment of spurious pains will depend in a great measure on their cause. When constipation is present, castor oil is the medicine which is most frequently given from the mildness and speed of its action; afterwards if there be symptoms of irritation from flatulence, a carminative mixture may be ordered where there is time for its action. I know nothing better than a blue pill over night and a dose of rhubarb and magnesia the next morning. If after free evacuation of the bowels these pains still continue, an opiate will be useful. When called to the case, too late to give a purgative, a large enema of chamomile tea, as is almost always done abroad, should be given. When excessive plethora is the cause, and the patient is young and sanguineous, a small bleeding will remove this state, and a dose of opium should be afterwards given. It is of much consequence to check these spurious pains, as the uterus does not act properly as long as they are present. Should you be satisfied that the patient is of a rheumatic diathesis, after a purgative give Dover's powder and diaphoretics. Attention to the state of the bowels towards the close of pregnancy, will often effectually prevent the inconvenience of spurious pains; indeed, I cannot, gentlemen, too deeply impress the necessity of this care on your minds.

I now come to speak to you of the *treatment of labour*. Usually speaking the glance of an experienced eye can tell pretty nearly whether a labour is likely to be a favourable one or otherwise, and this information is obtained from the general appearance of the patient. You will bear in mind that the more active and the more symmetrically formed she is; the more equally distended her abdomen; and the more exercise she has been able to take, even up to the time of her labour, the better you may expect her to pass through this process. I have before mentioned to you the necessity of emptying the rectum by injection; I must again allude to it here because it belongs to the treatment of labour, and because I cannot too strongly impress it on your minds. The labour is rendered more cleanly by it; and its duration is certainly shortened in many cases, as sometimes a mass of hard scybala is brought away from the rectum, which had it been allowed to remain would have proved a source of serious obstruction, and have tended considerably to retard the labour, as well as to obstruct the return of blood from the pelvic viscera, thus increasing the risk of hemorrhage. Merely for the sake of cleanliness, you should direct an enema to be administered. In this respect the continental accoucheurs are in advance of our own practitioners; for in Germany they almost always administer a large enema at the commencement of labour. I have before told you that this too will prevent the occurrence of spurious pains arising from constipation.

The uterus alters its shape very considerably during labour; as the process advances and the liquor amni drains off, the uterus becomes pyriform, its fundus more or less flattened, and the earlier this state occurs, the more effectual are the pains; where on the other hand the abdomen is very large, and the uterus much dis

tended, either by a large quantity of liquor amni, twins, a very large child, or any other cause, the pains are slower and less powerful. If however the over distention arise from excessive quantity of liquor amni, when some of this has drained away, the pains become more active.

The position of your patient during labour is important during the first stage, especially in primiparæ, in whom this stage is usually tedious it is not necessary that the patient should take to her bed; on the contrary you should endeavour to make her believe that labour can hardly be considered to have commenced, and you should encourage her to move about, or sit up as she may feel inclined. Till nearly the end of the first stage let her walk about or stand or sit, or, if she likes, go about her usual occupations. At the same time you will be careful to have every thing in readiness for her, in case the labour should progress rapidly.

The best position for the patient to take during labour, is a subject which has been much discussed; even at present it varies much in different countries. The earliest position of which we have any record, appears to have been a half sitting, half reclining posture, and is described in the first chapter of Exodus. This posture was revived in comparatively recent times by Ambrose Paré, who in 1570 invented a labour chair, which he used in preference to bed. This chair consisted of a reclining back, a seat with a hole in it, a board to press the feet against, cushions, and arms or straps to hold by in order to fix the trunk and upper extremities. You see, therefore, gentlemen, that the whole principle of these chairs is bad; we do not want rapid and violent labours, but safe ones. These chairs are accordingly much less used than they were formerly, in fact they may now be considered as entirely exploded. Although even now I believe they are used a little in some remote parts of Germany

In France women are delivered on their backs, lying on a low bed placed on the floor, which has been not inaptly termed *lit de misère*. In England we place the patient on her left side a position which has many advantages; the patient is more comfortable, and is not annoyed by seeing the proceedings of the practitioner who sits behind her; she is unable to exert an undue degree of force when the presenting part is passing the os externum, and thus laceration of the perineum is less likely to happen, as time is given for the parts to dilate; and from her knees being kept together, the chance of perineal laceration is rendered much less probable. The side position seems also to be the most natural one. An experiment was tried many years ago, at Heidelberg, to see what position the patient would naturally take. A young girl completely ignorant of what was expected of her was left entirely alone, and towards the close of her labour, when the last expulsive pains were about to occur, she naturally assumed this posture on her left side. At Berlin they use the labour-cushion, which seems to be a modification of the labour-chair. It was first proposed by Unger, and afterwards employed by the late professor Von Siebold of Berlin. It consists of a thick half mattress with a depression beneath the nates. This is all very well, but I must say I see no particular advantage possessed by it over the ordinary position, which is adopted in this country. The pains of the first stage of labour, are rendered much easier by frequent change of position, you will therefore so far encourage your patient to move about; but when the pains become more severe, and of longer duration, you will direct her to lie down, and you will take advantage of this opportunity of making a vaginal examination; indeed as soon as the os uteri has become somewhat dilated, this examination has become necessary. In popular language the act of examining is called bring a pain; but you will by no means take a pain, gentlemen, on the contrary, you will rather examine between the pains. You can gain no information during a pain, except with regard to the degree of dilatation of the os uteri, and you will always find this tight enough during a pain. In the interval between the pains, on the contrary, the os is relaxed and admits the finger more readily; the bag of membranes is not distended, and is therefore not liable to be ruptured during the examination; and you are able to feel the part presenting more easily through the loose membranes. When the os uteri is almost fully dilated, the patient should by all means go to bed, as the membranes may rupture, especially in primiparæ. If you have not already made an examination, it is absolutely necessary that you should do so now, both to ascertain the presentation, and to inform the patient of the progress of her labour. All aids to the patient in the shape of towels to hold by, or foot-boards to press against, during this stage of labour, are worse than useless, they are injurious; straining cannot hasten the progress of the labour, and it may be a serious injury by prematurely rupturing the membranes. As soon as the membranes are ruptured, you should repeat your examination; it may be that you have not quite made out the presentation, and now you can decide on it; or the cord may present; in which case it comes down into the vagina and cannot escape notice; in women who have had many children also, the head often remains very high in the pelvis until this time, so high that it can with great difficulty be reached by the examining finger, and in these cases you are obliged to wait for rupture of the membranes before you can ascertain the presentation with anything like certainty.

All attempts at artificial dilatation, I need not tell you are most improper, and all oily or unctuous applications to assist dilatation only prolong labour by irritating, and inflaming the os. Much has been written on this subject, and among others Stein has written a treatise "De Nova Enchyrasi ad partum accelerandum." As I have before told you however, in primiparæ, who are flushed and with a hot and dry vagina, a small bleeding will, when the pains are irregular, produce wonderful effects; the pains become regular, and act more powerfully, and the os uteri swells, and dilates rapidly. If the os uteri be dilated and the membranes ruptured, but the head not coming down rapidly, you need not keep the patient in bed. You may allow her to move about if she desire it, indeed in the Baltic provinces of Russia, labour is constantly conducted in the standing or rather walking position, but this position is injurious if too long continued; in most primiparæ, however, a change of position affords much relief. I must again caution you not to allow your patient to strain at this stage of labour, and I insist on this because, nurses and injudicious friends often advise the patient to do so. An old friend of mine, advised me when a student, never to allow any patient to strain until she could not help it. Very good advice, gentlemen, which I have never forgotten. Madame La Chappelle, supposes that may increase the activity of the pains by pressure on the perinœum. Although I can hardly agree to this, yet I am quite certain we may greatly assist the expulsion of the head by pressing it forward with the hand on the perinœum.

On no subject, is the accoucheur more tormented than as to the probable duration of labour; the patient is naturally anxious, and expects after your examination that you will be able to give her an idea, when her sufferings are likely to terminate. Nothing, gentlemen, is more uncertain; in fact, the only criterion I know of, is that mentioned by Wigand, who says that "the vagina be cool and moist and fully dilated throughout, the labour will be speedy; if however, the canal be dilated at its upper part, and contracted near its orifice, the first part of the labour will be speedy, and the latter part tedious; and if the canal be contracted at its upper portion, and dilated at its lower, the commencement of the labour will be tedious, and the latter part rapid. When you are teased by your patient, gentlemen, you must not express your opinion as to the time when the labour will be over; you must turn the matter off in the best way you are able; recollect that one unguarded assertion unrealised, loses for you, your patient's confidence.

The character of labours is often hereditary: a patient will tell you that her mother had tedious and protracted labours, and often you find two or three sisters of the same family, remarkable for the same peculiarity. As a rule I have observed, that if a woman have very easy catamenial periods, she will have very lingering labours, and vice versa.

Injury of the perinœum has been noticed from the earliest period, of which we have any records, and is mentioned in the book of Genesis, as having occurred at a birth of twins; among the vulgar the perineum has been considered a useless appendage hindering labour. A curious case occurred at Maunheim, some years since, illustrative of this idea, a midwife was sent to the House of Correction for slitting up the perinœum during labour. At our next meeting, gentlemen, I shall resume the subject of the treatment of labour with the management of the perinœum.

A COURSE OF LECTURES ON DISEASES OF THE SKIN.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XVII.

ACNE (*continued.*)

THE TREATMENT OF ACNE.

According to Willan and others.

GENUS.	SPECIES.
Acne	Simplex Punctata Indurata Rosacea

As proposed by Startin.

GENERA AND SPECIES.

ACNE

Simplex	Localis	Disseminata
Pustulosa		Confluenta
Rosacea vel	Generalis	
Erythematosa		Inveterata

Gentlemen,—Medical writers of all grades, and from the earliest times, have held the successful treatment of *Acne*, particularly of the species termed *Rosacea*, to be not the least difficulty which attends the art of healing; but yet, in justice to myself I must observe that in carrying out fully, the views detailed, when speaking of other cutaneous diseases, I have certainly been very commonly rewarded by a successful result. As usual the causes must be diligently sought for, and removed by appropriate remedies, measures, or restrictions. Local and general means for increasing the cutaneous circulation and determining the blood to the surface, will generally produce a favourable change in the malady, and I have found the hot air bath, with, or without, sulphur fumigations, of great service, whilst chalybeates, combined with the mineral acids, with the vegetable bitters and with iodine, have furnished my most useful internal agents; arsenical preparations, and mercurials, unless the latter should be indicated by hepatic or visceral disease, *are not indicated or required* in these cases, nor when used, have they appeared to me to be attended with benefit. The diet of patients afflicted with acne requires to be mildly nutritive, nor must a proper proportion of alcoholic stimulus be discarded, otherwise the digestive organs, which are seldom in a healthy condition, are apt to neglect their office. Vegetable acids, and antiscorbutics as they are called, and vegetable diet drinks, are in my experience worse than useless, I do not know whether I dare include sarsaparilla in this condemnation, though I feel inclined to do so, as I am aware that it is the strong hold of many of my medical brethren, whose experience must differ from mine, if sarsaparilla has proved of greater utility in these diseases, than the same quantity of mildly nutritive fluid. The external local treatment of acne is not the least important and must be regulated entirely by the stage and condition of the disease. In its commencement when a loaded state of the sebaceous

follicles is the most prominent symptom, moderate frictions with the flesh brush so as to open the pores and the extraction by pressure, of the larger collections of sebaceous matter, (the outlet of the follicle being dilated with some pointed but not too sharp instrument,) will be required; whilst a weak spirit lotion and the use of oatmeal, instead of soap may be enjoined. As the disease advances, and the suppurating points are numerous, large and painful, the vapour douche on the face, mercurial ointment with camphor, white precipitate with camphor, or the *Topique contre acne* of the Hopital St. Louis may be recommended: the latter is composed of slaked lime ʒ i. zinc ointment ℥i. and camphor ℈i. From fifteen to thirty grains of the ioduret of sulphur to an ounce of lard is also a useful application, as is a weak solution of bichloride of mercury in milk of bitter almonds, or thin quince seed mucilage. The following lotion, not to be found in books, you will find occasionally very efficient, hyposulphite of soda, ʒj. to ʒij. sulphate of alumina, ʒj. to ʒij rose water ℥viiss. cologne water ℥ss. for a lotion to be used by washing the part with a linen rag twice or thrice daily. Of course these proportions are not applicable in every case, but the composition is very useful in removing the unpleasant yellow stains of the cuticle as the acne declines, and it is perhaps more applicable to acne rosacea and pustulosa, than to the other varieties of the disease, as it always relieves the attendant itching. There are, perchance, few complaints which have at one time or other, produced so many nostrums as those under our consideration, and therefore I must refer the curious in such matters, to the authorities who treat on these occult subjects; but I may inform them, *en passant*, that unless the nostrum be used with judgement, it is quite as likely to deceive as to relieve, not only in acne, but in every other cutaneous or general ailment; though the same remedy, properly and seasonably applied, may be amongst the most useful and beneficial.

It sometimes happens that we may have succeeded in the removal of acne, particularly acne rosacea, but that a degree of redness remains on the end of the nose, or on one or two spots on the cheeks, which on examination is not found to be inflammation, but a dilated state of the minute cuticular vessels; there are two ways of getting rid of this disfigurement, both of which I have constantly found successful; when the vessels are very small and numerous, not appearing to be nourished by conspicuously large trunks, the best plan is to paint them over very lightly with nitric acid, of the pharmacopœia strength, which is to be immediately blotted off with bibulous paper; by this mean a blister is raised, and the cuticle detached after a few days, when it will be found that the morbid state of the capillaries has disappeared, or that they have so much contracted, that a second application at the end of a fortnight is all that is required. The acetum cantharidis may also be used in a similar manner though it is not so effectual. The second method has the same object in view, though the mode of its accomplishment is rather different, and it is only applicable when the red portions of integument appear to be maintained by the influx of several larger capillary trunks—a morbid condition, which at the end of the nose is exceedingly common. The plan I adopt in such instances is to divide each trunk in succession with the point of a fine lancet, and as the blood flows very freely, I restrain it by means of a small ring of steel or silver, which is mounted on a stem, an inch or two in length, and fixed into a handle at right angles; by this means I can as it were insulate the little wounded point, and arrest the hemorrhage, whilst the blood can be sponged away and the incision exposed, so that a piece of lunar caustic the size of a grain of sand can be introduced into it, by means of a probe with a flattened extremity, on which it has been previously made to adhere; this at once stops the bleeding and obliterates the vessel, whilst it produces no disfigurement, beyond a temporary black spot that may be covered with court plaister, or the blackness may be removed, by wetting it with a solution of iodide of potassium; I can assure you I have cured numerous red noses by this simple procedure,—which I may mention is applicable to the removal of small nævi and the congenital red marks called *Araneæ* (from their resemblance to a red spider, with its legs outstretched. The small mounted ring I am now holding, and which I have ventured to call, "*The Ring Styptic*;" was made by Lings of Jewin-street I will hand it round; this little novelty in surgical apparatus, you will also find a most useful agent in arresting bleeding from leech bites, until a grain of caustic can be accurately applied as already mentioned. I have also used it with advantage, in removing cutaneous tumours of various kinds for surrounding a troublesome bleeding artery till it could be secured the size of the ring may be varied, but I prefer it no larger than a quarter of an inch in diameter for general purposes; but I can imagine such a contrivance useful under a variety of circumstances requiring surgical interference, which it would be quite out of order to discuss at this moment—amongst such, are deep wounds of arteries, whether the result of accident, injury or surgical operation. I fear you may consider this somewhat trifling, but happily, you have no red spots on your faces, otherwise I am sure you would not fail to attach sufficient importance to observations which might point to a remedy for so suspicious a disfigurement.

I will not however detain you longer on such points but briefly recite a case or two, in illustration of my observations on the treatment of acne, and I shall choose those patients from whom the models are taken as far as they go. I can scarcely think it necessary to adduce an example of acne simplex in its first stages, as many amongst you will probably have witnessed this disease in your own persons—I shall therefore in the first place relate an instance of *acne simplex inveterata* which is illustrated by the model 6100—that of G. Wihelm, a German tailor, residing in Batty-street, Commercial-road. The age of this patient was 24, and he had suffered six or seven years from his disease. He was admitted on the fifth of September last, and the model was taken in the beginning of November, his condition having somewhat improved; but he was a timid and somewhat refractory patient as indeed you would judge from the impress of his features on the cast, which in other respects does not very well represent his condition—a circumstance arising from the necessity of using much oil in taking a mould of the face, which of course obliterates the minute markings of the cuticle. This was a case of *Acne Simplex Inveterata*, and was a very good example of the disease. The tubercular pimples varied from the size of a common pins head, to that of a large bead, and they were in every stage of their progress, from the simply enlarged and loaded follicle, to that of suppuration and cicatrization, whilst the skin had the peculiar greasy sallow hue, so characteristic of acne; and a violet vivid tint not only surrounded the larger vari, but marked the site of the cicatrices when the healing process had been accomplished. I have no doubt that this patient was a victim of practices, to which it is not necessary I should allude more distinctly, though I failed to elicit a confession of the fact. I could discover no other cause for this inveterate affection which covered the face, neck, and shoulders, and seldom maintains its violence to the age at which this individual had arrived, (twenty-four); there was some degree of constipation, and much languor and lassitude in the case, though the pulse was full and strong, and the temperament sanguine. The treatment consisted in the administration of aloetic purgatives, in combination with the use of iodide of iron, in the use of a weak mercurial ointment, at bed time to the affected parts; and a spirituous lotion in the day, which contained the Hyposulphate of soda decomposed by sulphate of alumina. The improvement was very slow in this case, from I fear, a continuance of the exciting cause alluded to and the patient is still in attendance, and takes the sulphur fume bath occasionally which has appeared much to benefit him, so that at the present time, his disease presents no very marked evidence of its former inveteracy though it is not cured: as the bowels have continued obstinate, an alterative mercurial has been prescribed from time to time, and he has latterly taken the sulphate magnesia and sulphate of iron in small doses twice or thrice a day, and used the bichloride of mercury in creosote water, as a lotion. I should mention that this patient was directed to wash his face with oatmeal and avoid soap and to enlarge the openings of the diseased follicles and squeeze out their inspissated secretions, whilst the suppurating vari were opened with a lancet, when a soft point in their centre indicated the presence of pus.

Another case of acne simplex, which presented sufficiently marked characters of the variety termed by WILLAN *Indurata*, the face only being affected, is that of Sarah Patts, *æt.* 21, admitted October 17th 1845, having suffered three years; as there was amenorrhœa and leucorrhœa in this case, the tincture of sesquichloride of iron in infusion of quassia was directed, an ointment containing white precipitate was used at bed time, and a lotion of trisnitrate of bismuth, and bichloride of mercury during the day: all the suppurating points were opened with a lancet, and the curd-like contents evacuated, the face was well steamed over boiling water before going to bed and the ointment afterwards applied. The bowels were regulated by an aperient pill and the leucorrhœa moderated by an aluminous lotion, this young woman attended weekly, with progressive and marked improvement in the local and general symptoms, till the 28th of November, 6 weeks from her admission when she reported herself cured her face manifesting no remains of her disease.

The next case I shall recite is one of the species I have termed *A. Pustulosa.* Mary Tibbs, *æt.* 22, of Thomas-street, Brick-lane, became a patient on the 1st of December last, having suffered during one year and a half from her disease, which affected the nose, forehead, and cheeks. The pustules in most instances were quite insulated, though in different stages of their progress; a thin reddish scab covered some of those which had broken and discharged, others were filled with a straw coloured pus—a few exhibited a red spot of an irregularly angular shape, as though the skin had been forcibly scratched or torn off, whilst a certain number manifested mere slight conical red pimples the size of large pins' heads—a few of these pimples and other appearances were scattered over the body, between the breasts, in the hollow of the back, and on the thighs but they were neither so numerous or important as to attract the patient's attention, until enquiry was made concerning them. A considerable degree of itching attended the acne, but there was no derangement of the health—the complexion was pale, save in the vicinity of the diseased spots, where a brighter redness than is witnessed in other forms of acne was observed, which also extended further round the face, and was most remarkable in the few situations where the pustules had become confluent. An acidulated solution of sulphate of magnesia, a few sulphur vapour baths, an ointment containing white precipitate of mercury and precipitated sulphur, and a spirituous lotion holding borax in solution, have very speedily subdued this disease, so that the patient presented herself to me on the 6th of this month, five weeks from admission, and I wrote *well* against the date of her attendance; a result, I may remark, which in this species of acne is very rarely attained in so short a time: indeed as I have before observed the contrary may commonly be prognosticated. As a case of this rather uncommon form of acne presented itself yesterday in the person of a youth, aged 19, living in Shoreditch, I directed him to attend here to-day for his medicines; and have now the pleasure of introducing him to your notice before any means have been adopted which might modify the characteristics of the disease; it has had possession of his face for about four months, and you will, I think, observe considerable distinctions existing between it and acne simplex: the most remarkable is the greater degree and acuteness of the inflammation, as evidenced not only by the florid redness and heat of the parts, but by the nature of the suppuration which you observe in many points, whilst the tubercular character of acne is very much lost—nothing like maggot pimples or indurated collections of sebaceous secretion existing in any of the follicles. In addition to this much itching exists, and yet I think you will agree with me, that the complaint is neither porrigo, impetigo, or scabies, but that it has all the characters of a true acne, a fact which its obstinacy and duration will not fail to verify. The model, marked 6421, of acne rosacea was taken from the next case, to which I shall briefly direct your attention: it is that of Maria Wood, aged 29, residing in George-street, Whitechapel; she was admitted on the 27th of last October, having suffered four years from acne rosacea. You will perceive that this case commenced at the period the varieties of acne I have hitherto mentioned, terminate. The condition of this patient is tolerably well represented by the cast, but the complexion is not pourtrayed, as it presented a yellow bilious aspect arising from hepatic disease, which indeed was the probable cause of the acne; this patient stated, however, that she could assign no reason for the eruption, which commenced four or five years ago by a few red spots across the bridge of the nose, that assumed a florid and diffused redness after meals, particularly if tea or malt liquor were taken; small conical vari soon made their appearance on these vermillion spots, which were surmounted here and there by a flattened small yellow pustule, that shortly broke and discharged a little sero-purulent

secretion. A yellowish thin scab followed, until the healing process occasioned it to fall off, when a brownish tanned spot occupied its place; in the meantime the redness and tubercular eruption extended across the cheeks and upon the chin and forehead until the face presented the appearance shown in the model. On inquiry, this woman had a pain in the right side, increased by pressure under the cartilages of the ribs, and uneasiness was felt beneath the lower angle of the scapula, and on the top of the shoulder on that side: her evacuations were of a clay colour and irregular, mostly relaxed. I considered these symptoms sufficient indications to administer mercurials, and therefore directed she should take one sixth of a grain of bichloride of mercury in solution, with three or four drops of laudanum three times a day; a tepid bath for three-quarters of an hour, to equalise the cutaneous circulation, was ordered twice a week, and the local application of weak mercurial ointment with creosote at bed time; a sulphurous acid lotion being used during the day; no change was made in these remedies and measures during the three subsequent attendances of this patient at intervals of a week or ten days; the improvement in her health and in the appearance of the eruption was marked and progressive, so that on the 30th of November, five weeks from her admission, she returned thanks for a cure of her four years' malady and took a supply of an aperient chalybeate and the local remedies, which were to be used should any further occasion present itself. I must not neglect to remark, that every variety of acne is very liable to reappear, on the advent of the exciting cause, whether this be error in diet, visceral disease, or morbid habits of any kind; and indeed sometimes its repeated attacks can be referred to no obvious origin, but seem rather to be influenced by some peculiar idiosyncrasy, or habit, in the skin of the patient. Acne is especially a cutaneous disease, which torments the rich as well as the poor, and at the youthful periods of their lives, and in the conspicuous situations presented by the face, neck or shoulders, so that this disease will be more frequently brought under your notice than any other; although much deterred by a belief in its incurability, particularly in the form known as *acne rosacea*, which generally obtains, not only amongst patients, but the authorities who have treated on the complaint. Thus Bateman in his Synopsis, observes "The perfect cure of acne rosacea is in fact seldom accomplished, for whether it originate in a strong hereditary predisposition, or from habitual intemperance, the difficulties in the way of arresting the habit of body, are almost insurmountable."—*Bateman's Synopsis*, p. 402. Rayer and Cazenave have expressed similar opinions in their writings, but I am sure I can refer to the numerous cases recorded in the register of this Institution, and to the patients themselves, in proof that my practice has been more fortunate, indeed I am inclined to place acne rosacea where no hypertrophy of the skin has taken place, as amongst the most readily alleviated cutaneous diseases, a month or six weeks commonly sufficing for a degree of amelioration that patients frequently regard as a cure, though, may I beg you will not forget that it is not unusual for these parties to apply a second, or a third time for relief, as a relapse into their former habits, most commonly produces a return of the malady. It is surprising how frequently a predilection for malt liquors and salads, and a gratification of such tastes, can be traced as the causes of these returns, it therefore behoves the practitioner to place a patient on his guard on these points, when dismissing him. Relieved from the disfigurements of acnous complaints indeed, a carefully regulated diet, with a proper proportion of alcoholic stimulants in a dilute form, will be found to be the best adjuvant in the cure of acne, whilst a vigilant subsequent adoption of the same plan will prevent a relapse. I believe I have now, gentlemen, put you in possession of the best means with which I am acquainted for the treatment and cure of this disease, you will observe no great novelty in my remarks, nor are the poisons and irritants administered, which seem required by many affections of the skin, yet I cannot think, from comparing the success which very constantly follows the treatment of these cases, as I have advised, and the results detailed by authorities on the subject, that the plan recommended can be usually adopted; otherwise, my good fortune is in the ascendant, as I scarcely or never met with a case of acne rosacea, of however long standing and inveteracy, that was not cured or materially alleviated.

At a future period I shall have to speak of two very similar affections in their nature to acne simplex, when considering cutaneous tumours, these are the follicular disorders known as atheromatous tumours, and molluscum, but if you please we will defer their consideration until the occasion referred to, as, were it commenced at this time, I should be led into details that might destroy the unity and completeness which I am constantly endeavouring to accomplish, in presenting these cutaneous sketches to your kind attention; for the same reason, therefore, I shall not commence the subject of sycosis until next week.

THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine, formerly Physician to the Bicetre and Salpetrière Asylums, Author of the "Traité Medico-Philosophique sur l'Aliénation Mentale," "Medecine Clinique," "Nosographie Philosophique," &c., &c. Translated, with Notes, illustrative of some important Doctrines in Physiology, Phrenology, and Moral Education,

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopedia of Practical Surgery, &c.

LESIONS OF THE SENSIBILITY AND SENSES.

These lesions, like others of the nervous system, occur in the state of exaltation (hyperesthesia of Andral); in the state of depression (anesthesia), and in a state of perversion (illusions, pains).

Exaltation of the Sensibility in the Organs of the Senses.

We see individuals whose sight is so sensitive that they cannot bear to look on bright light; they can see only in a feeble light. This affection often arises from long confinement in an obscure place. In others the exaltation of the sensibility of hearing renders the slightest noise painful. The sensibility with regard to smelling, presents also, phenomena still more curious: some highly nervous women are led to perceive odours and miasms which no one else can perceive, and can distinguish one person from another by the smell. In some persons this sense is so acute that they cannot bear the smell of certain animals, without producing great disorder of the nervous system. The cutaneous system may also become the seat, completely or partially, of very acute sensitiveness, in some cases exaggerated in one half of the body, and enfeebled in the other half. During this state of exaltation, mere pressure on the skin, or even the approach of the hand to touch it, produces shocks or painful ticklings. In our ninth case of general paralysis, we had exaltation of the sensibility on one side, depending on acute hypertrophy of the brain; under some circumstances this cutaneous exaltation comes on by degrees in consequence of chronic alteration of the nervous centres.

It may happen in the same individual, that all the senses may be very acutely morbid at the same time, producing a state of general suffering, fortunately rare. Such extreme susceptibility imposes the condition of living in a state of isolation and seclusion from every object that can affect the sight, hearing, smell, and touch. This physical condition has most unfavourable influence on the character of the patients: they become irascible, fretful, shed tears without motive, state that they are a prey to suffering they cannot account for, and all the sensations that render life happy are to them a subject of continual complaint and pain.

Their consciousness of the slightest atmospheric variations is very curious: they are aware beforehand, and with rigorous precision, of the slightest changes of wind, and of the state of weight or electricity of the atmosphere. This faculty of prevision, unknown in the ordinary state, depends undoubtedly on the exaltation of the general sensibility. This exaltation of the sensibility arises from various causes; it may arise from prolonged intellectual labour, from watching, excess, and the deeper passions of the mind; or it may follow from causes the very reverse of those; from inactivity, from the privation of any habitual excitant, as tobacco or poppy; a too severe or too prolonged abstinence in course of convalescence, may give rise to it. There are cases in which it does not arise in the brain, but from imperfectly performed functions of the life of nutrition, more especially from the imperfect accomplishment of the hæmatosis, which has a very remarkable influence on the nervous system. It might be assumed, that the more the hæmatosis was easy, the more molecules, rich in nutritious principles, would the nervous system receive; and, as a consequence, the more it would be excited; this is not the case, but just the contrary happens, and of this we may be readily convinced by observing the irritative influence which chronic and protracted diseases produce on the nervous system.

When this exaltation of the sensibility depends on a cerebral cause, our first indication is to combat this cause, employing at the same time warm baths and diluents. If it be the result of a defect of excitation, the patient's strength should not be reduced, as a debilitating regimen would only exasperate the symptoms; a regimen too mild may cause an excess of sensibility in the tongue and conjunctiva; if we are too tender with this sensibility, it would happen at last that nothing can be borne, which, by acting against it would deaden it gradually. Dry frictions should be used on the skin, gentle at first and progressively rougher, their effects should be seconded by cold sea bathing, pure air, sun, and muscular exercise, which can act directly on the blood; by substantial unexciting food, a moderate use of generous wine, and abstinence from tea, coffee, and liqueurs: preparations of iron and quinine will also be proper sometimes; these nervous pains are cured, as it were by a charm, by a drop of orange flower water or of ether. Narcotics are more hurtful than beneficial.

The treatment of these affections is often rendered difficult from the derangement of the digestive organs; but we are not to lay too much stress on the pains the patients complain of in the intestinal canal, as these pains are nervous. There are some individuals who feel acutely the pulsations of the heart, the circulation of their blood, the process of digestion, all these symptoms of exaltation of the sensibility may be classed chiefly with those of hypochondriasis.

II

DIMINUTION OF THE SENSIBILITY, GENERAL OR PARTIAL.

In whatever region of the body the sensibility is diminished or abolished, we must admit that the lesion depends on an alteration in the nervous cords, or centres governing this function. Lesions of the sensibility may be independent of those of the motility, as the faculty of motion is independent of that of sensation, although they are exercised in cords, and fasciculi, and centres, common to each other; for, though the anterior cords of the spinal marrow are peculiarly motory, and the posterior cords are peculiarly sensitive, they are not separated in the great nervous centres by a line of demarcation so precise as to prevent their being intimately connected; this structure explains how it is that the cerebral hemispheres, which should exhibit lesions of the intellect only, do also exhibit very decided ones also, both of motility and sensibility.

Abolition of sensibility is often the result of a direct injury to a nerve; a man had his wrist lacerated by the bridle of his horse, and sensibility was destroyed in the hand. The median nerve was injured, being flattened like a ribband, and adhering to the tendons. The nerves of the fingers were altered in texture, resembling ganglions. Andral mentions a similar case.

The cutaneous sensibility may be wholly or partially abolished; when the abolition is partial, it generally affects one side completely, while the sensibility of the other side remains natural or may be much exalted; the difference of the symptoms depending on the seat and extent of lesion of the sensitive cords.

We have seen in the œdema of the brain, and in general paralysis, how various are the lesions of the cutaneous sensibility; sometimes the limbs, certain regions of the chest and abdomen, the conjunctiva, or the schneiderian membrane are struck locally with complete insensibility. In others, the sensibility is extinguished gradually on one side of the body, and without any very apparent cause; or it is suspended for a time in the fingers of one hand, or in both hands and feet at once. A woman, who slept in the sun,

and who had a phlyctenous eruption on the skin, was attacked with insensibility in both hands and feet, at the same time, to such a degree, that she several times burned her toes without being aware of it. In others, the insensibility has shown itself in rings or circles, or in different parts of the body.

It varies also in duration, lasting only a few hours or days, or for months or years; it may disappear and then return, and pass from one part of the body to another; its attack may be sudden or gradual. A young man, who had a fracture of one of his ribs, perceived that his hip was insensible; the insensibility extended gradually to the limb, and then to the opposite limb, the trunk, and finally to the integuments. In the majority of cases, the attack is sudden, and from a lively emotion of joy or fright. But it is in hysteria and somnambulism, that insensibility exhibits its most singular phenomena; and these also are the cases, in which the most experienced physician is liable to be deceived.*

III.

PERVERSIONS OF THE SENSIBILITY.

1.—*In the Organs of the Senses.—Illusions.*

We know that in hallucinations, the action is confined to the brain; in illusions, on the contrary, it is in the extremities of the nerves that the sensibility is perverted, and, as the effects of this reaction are subjected to the influence of the insane man's ideas, they give rise to continual errors in the nature and cause of his sensations. A man in health is subject to illusions of the senses, but his reason corrects the error. This is not the case in the insane; and if we consider that the perception of a sensation requires three conditions—integrity of the sense that receives the impression; integrity of the nerve that transmits it; and integrity of the brain that perceives it; we shall not be surprised at the frequency of illusions in insanity, in which always one, and often two of these conditions are wanting. The sounds that a maniac hears are those of a friend who is coming to his relief, while the melancholic imagines he hears the cries of his enemies, or of the police in pursuit of him; these are illusions of hearing.

Illusions of sight are no less frequent, producing resemblances that give rise to excitement, fear, indignation, and fury. A lady imagined that the wife of a physician was her rival, and wanted to attack her whenever she met her. A young man, labouring under erotic delirium, imagines that he sees in an opposite house the female who constantly occupies his thoughts—his manner, gestures, and countenance, show the vivid pleasure this illusion gives him; he is compelled to return into his own house, and with difficulty convinced of his error. He is at the same time under the influence of strong religious ideas, and imagines that his servant is Voltaire, he speaks to him in abusive language, telling the infamous Voltaire to leave his presence. A female, labouring under hysteria and mania, watches constantly at her window, and every single cloud she sees, says it is Garnerin in his balloon, and she calls him in a loud voice.

It is to illusions of sight that we must attribute the great pains that some insane persons take in collecting stones, pebbles, and pieces of glass, imagining them to be objects of value, and this, too, is the cause that prevents them from reading or writing, as they see the letters riding over each other.

The illusions of smell and taste are also well marked in the insane; in the beginning of their disease, they generally refuse to take food in which they find a bad taste, or a particular smell, and hence their prejudices against the servants, and their fears of being poisoned. These illusions often depend on disorder of the digestive functions, and are soon dispelled. They have nothing of the obstinacy of the melancholic, who resort to a refusal of food as a means of suicide. A patient who was ordered an infusion of digitalis, said it was urine they gave him.

The illusions of touch of the skin are still more remarkable. The skin of the patient is often dry and earthy, and at other times so sensitive, that it cannot be touched without producing a painful impression. There is a patient at Charenton who cries out when he is touched, saying "you hurt me—don't strike me." A furious maniac, whom it was found necessary to place in a cell with straw alone, arranged it in a circle, placing himself in the empty space in the centre, he was observed blowing in every direction, and uttering cries of distress, believing that each straw was the bill of a bird of prey, that he was endeavouring to keep from attacking him.

Visceral illusions are amongst the most curious phenomena of the lesions of organic sensibility; to them belong the errors of the hypochondriac, and of many other forms of chronic delirium, both in men and women. The brain, independently of the impressions transmitted to it from the five senses, receives others from the internal organs, the lungs, heart, digestive organs, and especially from the organs of generation. In the lungs, the influences of phthisis give rise to feelings of happiness and of buoyant hope; organic lesions of the heart predispose singularly to moroseness, sudden passion, and to gloomy anticipations.

In the intestinal organs, these morbid reactions become veritable illusions for the insane: a melancholy patient complained that she had a live animal in her stomach; she was suffering from a cancer. Another believed she had a regiment in her belly, and could feel the soldiers fighting with each other, and wounding her with their arms; she was subject to intestinal pains. An insane patient at the Salpetriere, *the mother of the Church*, believed that she carried in her belly all the personages of the old and new Testament; she heard and felt the blows of the hammer of the crucifixion. The autopsy shewed an inflammatory adhesion of all the viscera to each other. A maniac used to strike his knee with his fist violently, believing he had a thief in his knee.

The most extraordinary illusions amongst insane females are those that arise from the generative organs; they experience all the sensation of the union of the sexes, think themselves in the arms of a lover, or a ravisher. It is not uncommon to find such persons with eruptions, ulcerations, or cancer of the neck of the womb. A patient feels during her sleep some one get into her bed and tempt her; she feels horrified at his proposals, she thinks herself lost, dishonoured, because it is said that she yielded; her conclusion on this point is too strong to be shaken.

The treatment of illusions of the senses may require the use of physical remedies in order to calm, or to remove the lesions that excite the illusions. Sometimes applying the hand on the eyes of a furious patient, has calmed her—she believed that frightful objects were passing before her. The same effect is not so easily produced in visceral illusions, and a clue to the proper treatment can only be sought in the study and appreciation of the organic cause on which they depend.

2.—*Perversions of the general Sensibility.*

Observation shews that there are cases in which the perversion of the sensibility is confined to certain organic instincts, prompting to the use of certain elements or liquids. The perversion may proceed to such an extent as to shew itself in a horror of liquids as in hydrophobia.

The horror of liquids alone may constitute a disease. An invincible repugnance for drinks is observed in hysteria, in dangerous fevers, in inflammations of the œsophagus and pharynx, and it is one of the symptoms, peculiar to rabies, which therefore is improperly called hydrophobia.

3.—*Perversion of the sensibility with pain.*

There are circumstances in which this pain is the sole malady; it may be fixed in a nervous trunk, and follow its chief ramifications, or it may have no fixed seat, manifesting itself in different parts of the body. In the first case, we have neuralgia; in the second, it manifests itself in the head, body, or limbs.

CAUSES OF CEREBRAL DISEASES.

—*Predisposing causes.*

These are hereditary, the critical period of life in women, the progress of age, parturition, certain dispositions, certain conformations of the brain, according to Gall, and the influence of public events.

The brain, of all the organs, is certainly one of those in which hereditary predisposition manifests most strongly its unfavourable influence. It is by heredity that almost all the cerebral affections are transmitted, and this is more marked in the higher, than in the lower classes of society. The first families in France have thus become extinct, or have at last reached a degree of intellectual degeneration inevitable on account of their position compelling them continually to form alliances limited to the circle of a few privileged houses. The jews, whose religious prejudices have compelled them to intermarry with their own people for ages, present the same degeneration, especially in Germany and Poland, where they are kept apart from the general community. In France, this state of isolation can scarcely be recognized.

It is not uncommon to see amongst the insane at the Salpetriere, two sisters, the mother and daughter, and sometimes the grandmother.

Heredity bears a twofold evil, in being often not only the sole direct cause of cerebral disease, but of also disposing the brain to be more readily affected by the bad effects of other existing causes. We thus see several members of the same family becoming insane under the same circumstances and at the same age. A Swiss merchant had two sons and a daughter, that successively became insane at the age of nineteen. There is a family at Nantes of seven brothers and sisters in a state of dementy. If exact information could be obtained in hospitals we should be able to acquire a certitude that heredity is a still more frequent cause than it is supposed to be at present, not only of insanity, but of apoplexy, epilepsy, cerebral fever, and of all the other chronic or acute disorganizations of the brain.

Hereditary insanity shews itself early in eccentricities of disposition, singularities of taste and habit, a strange and always ill grounded manner of acting and reasoning, an extreme readiness of contracting likings for the most frivolous things, an irascibility and obstinacy. In some females, it is sometimes shewn in an extravagant taste for accomplishments, works of imagination, or for serious studies uncommon in women.

It must not, however, be inferred from hereditary predisposition, as regards all nervous affections, that the children of parents so affected must necessarily be attacked in the same way, especially when the predisposition is derived from the father, or mother only. The children may escape its influence, if they be not exposed to similar conditions of excitement. Education and moral training, modify favourably the physical predisposition, and this is accomplished by teaching them from their tenderest infancy, to conduct themselves well, and by placing them in the world, in positions, where they may have the certainty of a certain and moderate livelihood, free from the hazards of speculations for place, or fortune.

In the majority of cases, the predisposition is so unfavourable, that neither care, nor education can avert the nervous affection, even under the most favourable circumstances. In epilepsy, and suicidal mania, so unfavourable is heredity, that it rarely fails to manifest its influence. In one family, a mother and three daughters have committed suicide.

In women, the consequences of parturition predispose singularly to mental alienation; in this state, they become highly impressionable, and sometimes a slight emotion brings on delirium. It may even at last have such influence over the cerebral functions, that every fresh accouchement brings on an attack of mania, without any other cause; women who have had five or six such attacks, are not uncommon at the Salpetrière.

The critical period of life in women, also predisposes to cerebral, hysterical, and convulsive affections. At this period, while the equilibrium of the functions is disturbed, the desire of pleasing seems to be augmented, while the charms of the person are impaired. It is then, that spite and jealousy, drive well bred women into fantastic devotion, while those who have not received an education, become addicted to drunkenness. The progress of age too, by weakening the springs of the system, predisposes the brain to all the physical, and intellectual decadences that afflict the aged.

It is to certain dispositions of the mind and character, more especially that we must attribute the ready development of the numerous diseases of the brain: such as the natural defects of a feeble intellect, influenced by bad instincts, impetuous passions, intellectual labour confined to a small circle of speculations, ideas on religion, or politics, the anxiety of business, startling public events, which stir up and change the prevailing ideas of a people. It would not be difficult to discover in the records of public and private establishments, from 1789, down to our own times, the characters of the delirium, peculiar to those different periods.

We have just mentioned dispositions of character as a natural cause of several cerebral affections, of those especially distinguished by perversion, or exaltation of the instincts. Of all these causes, the most powerful are those which depend on the conformation of the brain itself, and the anormal preponderance of some of its parts over others. It is on such preponderances of the cerebral mass in the anterior, lateral, superior, and posterior regions, and the observations to which they have led, that Gall has been enabled to found his doctrine, thus localizing the developments of man's intellectual and moral nature, by reference to the organic dispositions of the several parts of the brain.

It has been remarked, that in the brain, as on other organs, the development of one part of an organ, is almost always effected at the expense of the rest of the organ: thus we see persons, in whom the back of the head is largely developed, while the forehead is flat or retiring. Others on the contrary have the frontal region large, and the back of the head flat; in others, the head rises like a sugar loaf, while the anterior, lateral, and posterior regions are flat, while in others, the lateral regions alone are developed. The largest development of the encephalon, which we find in the busts of Plato, Montesquieu, Haller, Byron, Cuvier, &c., is the rare one that takes place in all the portions of the brain at the same time, and in the proportions of that organic equilibrium, of which an ideal type is represented in the head of the Apollo Belvidere. When this development occurs in only one region, the developed portion must of necessity exercise a predominance over the functions of all the rest, and it is these influences of the nervous mass that we must recognize, as predisposing causes to some of its most important disorders.

Functional, or Moral Causes.

Causes that lead incessantly to derange the organization of the brain, by the very exercise of its functions are the most frequent, not to say, the only ones that produce its most serious maladies. The records published by Pinel, Esquirol, and some English and American physicians, leave no room to doubt on this point. In reading the numerous cases of insanity, to be found in authors, one is struck with the proportion arising from moral causes. It amounts almost to a popular axiom. The first question we ask an insane person, if he be capable of answering, is whether he has had troubles, anxieties, or sorrows? And is it not at the time of life, when the intellect is in full power, and the passions are at their greatest energy, that we see developed the most alarming nervous disorders? In infancy and old age, physical weakness and carelessness, blunt all those distresses and emotions, which in mature age so violently disturb the brain.

It is often difficult to obtain a full avowal of their secret sorrows from women, and young girls; yet they often suffer torments and deep distresses, which they will never confess. How many young persons there are who love in secret, who, deceived in their hopes and confounded with shame, lose their reason, without daring to make any avowal to their family? Then, the secret jealousies, the novel reading, and the chimeras, with which a mind still free from distrust is filled, the sad reality which soon dispels them; all these causes act silently in young women, from an early period, giving rise to insanity, epilepsy, and hysteria, and it is often only long after the occurrence of disease, that chance reveals the true cause.

Moral causes may be said to be as various, as the acts of the understanding itself, as in general they are but an exaggeration of its functions, and we call them on this account functional causes. They are made up chiefly of whatever agitates the mind suddenly, surprise, fright, anger, joy, sorrow, jealousy, hatred, or whatever wounds a man in his inclinations, affections, ambition, pride, or in his religious or political ideas. Social position, and education, besides modify these first causes in a thousand ways; in the lower classes by bad conduct, debauchery, harsh treatment, misery, or dissipation without care for the morrow. In young women, by the alternative of shame or poverty, crossed love, a disappointment in marriage, or exaggerated ideas on religion. In persons of weak mind, this religous tendency combined with a disposition to love, gives rise to those extatic loves for God, a Saint, or the Virgin, which so readily degenerate into melancholy fears of demons, and of future punishments. In the upper classes, disappointed ambition, love, vanity, the excesses of study, and reverses of fortune are the commonest causes of all kinds of nervous affections; some of them act at once, producing suddenly symptoms of delirium, convulsions, or paralysis: such are fright, violent anger, sudden loss of money; while others act silently and slowly. Sadness, jealousy, religion and political ideas alter the cerebral functions only by long repeated action. In mental alienation, the delirium is thus established gradually, becomes concentrated, and exhibits itself at last when it can no longer be controlled by reason.

In all these acts, it is the brain therefore that alters itself by the exaggeration of its own proper faculties; all tumultuous and passionate movements, all concentrated and exalted ideas, are but the first effects of a nervous superexcitation, which passes easily into a morbid state, and which by means of sympathetic reactions is extended to the whole economy. Thus the general expansion from joy, the epigastric constriction from sorrow, the palpitations of the heart from fright, and the muscular exaltation from anger, are but the indirect result of nervous effects, which produce the most profound disorders in the brain.

III.

PHYSICAL CAUSES.

The predisposing causes from being best known and most readily appreciated, are exposed at great length in works on nervous diseases. On this account we have bestowed on them a succinct indication only. As regards physical causes, we must proceed differently, as they embrace almost the whole of the general and pathological anatomy of the brain; then history and learning on the symptoms are still sufficiently obscure and contested to require our dwelling on them at some length. Moreover to seek out and describe those physical causes, would be merely to seek out and describe the maladies themselves, and the lessons on which they depend. But in the diseases of the encephalon, we may confidently repeat that the pathological alternations present general and determinate characters, and in the present state of our knowledge, our aim is no longer to show identical lesions for identical diseases—that there are for instance, particular lesions for insanity, epilepsy, and others for general paralysis. This would be pursuing chimeras which the facts disprove, and will continue to disprove more and more. In all the cerebral affections, acute or chronic, the nervous pulp undergoes successive deformations which are now capable of being reduced to general laws.

But the inevitable consequence of this first truth is a result that we have already stated, viz., that it is not according to the nature of an anatomical lesion, but as it interests a given order of fibrous fasciculi, or the centres composing the encephalon, that we can discover the difference and special nature of maladies. According as these fasciculi and centres are intellective, motory or sensitive, as they are more irritable in certain parts of the cerebro-spinal axis than in others, as their lesion is isolated, or complicated, we shall have according to the duration, depth, and extent of the lesions, diseases very different from each other, or complicated with symptoms directly bearing on the functional lesion, even though the anatomical characters of the alterations be the same, and in places varying greatly from one another. It is in this sense that we must understand what is meant by the word *seat* in the study of cerebral affections. Diseases of motility may be seated wherever there are motory nervous fibres; diseases of sensibility, wherever there are sensitive nervous filaments. In the brain, these two orders of nervous fibres concur in the formation of the hemispheres, which are centres for the sensations. It is for this reason that intellectual lesions may be complicated with lesions of the sensibility and motility, in the different alterations of which the brain may be the seat.

ORIGINAL CONTRIBUTIONS.

ON ETHNOLOGICAL SCIENCE IN ITS RELATIONS TO MEDICINE AND PHYSIOLOGY.

By Richard de Gumbleton Daunt, M.D. (Edin.) Member of the Faculty of Physicians of Rio de Janeiro, and Member of, and late honorary Secretary to, the Parisian Medical Society, &c.

"Plus j'ai voyagé, plus je me suis convaincu que les *races* sont le grand secret de l' histoire des mœurs L'Homme n'est pas aussi educable que le disent les Philosophes. L'influence des gouvernements et des lois est bien loin d'agir aussi radicalement qu'on le pense sur les mœurs et les instincts d'un peuple; tandisque la constitution primitive, le sang de la race, agit toujours et se manifeste apres des milliers d'années dans les formes physiques et dans les habitudes morales de la famille ou de la tribu. Le genre humain coule par fleuves et par ruisseaux dans le vaste ocean de l'Humanite; mais il n'y mêle que bien lentement les eaux, souvent jamais, et il ressort comme le Rhone du lac de Genève avec le gout et la couleur de son onde. Il y a la une Abime de Pensées et de Meditations."—*Extracted from "M. de la Martine's Voyage dans l'Orient."*

When studied with ever constant reference to the grand primordial truth of the unity of origin of the human species, the doctrine of races is one of the facts most fecund in its applications, and most useful in unravelling the mysteries, of the various destiny, &c. &c., of nations and empires, which the whole range of philosophy can offer. In this paper, I shall first remark, on the fact of the existence of races, and next, on the utility of the knowledge of this truth to the practice of medicine.

It cannot be doubted, that the several races into which the human family is divided, existed at the earliest historical period, in as full contrast as at the present moment; some of them, even then, possessing a stupendous development of intelligence and some progress in the arts, while others were sunk in all the barbarism which characterizes in our day the native of Tasmania or New South Wales. Were this not so, the Negro contemporary of the Pharaohs' would not have left his effigy on their sculptured monuments the analogue of the Negro of our own times. Had time been, an indispensable condition for the development of the human being from a supposed imperfect and savage life, how comes it, that a civilization so remarkable should, at the most early known epoch, have appeared in some races, while other contemporary races, with the aid of four thousand years, are still as in that early day? Again, if climate really solved the question, why should the Cape of Good Hope

which, as from personal observation I can testify, enjoys a delicious and temperate climate, be the habitat of the type of the Melanien branch of the Æthiopic variety—the most degraded form of man, the Caliban of his kind, the hideous and degraded Boschjesman—who possesses in their extremest degree, the anatomical peculiarities of the Ethiopian,—the oblique teeth, the imperfect utterance, the removal of the occipital foramen from the centre of gravity of the cranium, the inclined pelvis and inferior extremities, the posture between the vertical of the Indo-germanic man and the oblique station of the Ourang? In their incapacity to continue to exist as a race in an enslaved condition, the Melanien tribes, however, differ from the Negro and approximate to the American native. How, if external causes were as all-powerful as is supposed generally, could it happen that the race, most favourably situated in regard to external influences of all those of Africa, should be exactly the most degraded and unreducible by civilization? The learned Bishop of Melipotamus, has the following passage which shews him to be inimical to the idea of a primary state of barbarism common to *all* mankind. "Truly there is a sap in nations as well as in trees; a vigorous inward power ever tending upwards, drawing its freshest energies from the simplest institutions, and the purest virtues, and the healthiest moral action. While these form the soil in which a people is as it were deeply rooted, its powers are boundless; and as these alter and become exhausted, it likewise will wither and decay. Assuredly there was a vigour in the human mind, as compared with ours, gigantic, when the Homeric songs were the poetry of the wandering minstrel, when shepherd chiefs, like Abraham, could travel from nation to nation, and even associate with their kings, and when an infant people could imagine and execute monuments like the Egyptian pyramids, and if of nations we may so speak, what shall we say of the entire human race, when all its energies were in a manner pent up in its early and few progenitors; when the children of Noah removed but a few generations from the recollections and loss of Eden, and possessing the accumulated wisdom of long-lived patriarchs, were marvellously fitted to receive those strange and novel impressions, which a world just burst forth in all its newness was calculated to make; yea, when they themselves, an infant race, struggling on one side against the ravages of the late disaster, and on another against the luxuriancy of its renovating influence, must have felt within themselves a boundless energy in thought and action, a quickness of apprehension, a richness of contrivance and a might in execution equal to the crisis, and such as later generations could never want." He quotes also from Schlegel the following passage as combating the doctrines of Helvetius and others. "The reflection that nature, or rather its author, will place his creatures in the state for which He intended them, that, if man were formed in body and endowed in spirit for a social and domestic life, he can have been no more cast originally into a desert or a forest, savage and untutored, than the sea-shell can have been produced on the mountain top, or the elephant been created amid the icebergs of the pole; this reflection must exclude the idea that the savage state is any but a degradation, a departure from the original destiny and position of man." Anthropologists have singularly passed over these subjects in the generality of cases: were it not so, physiological writers would not rest satisfied with speaking of five divisions of the human race; and by physicians they have been almost wholly overlooked, except in so far as regards "temperaments," which is one position from which the physiological differences of races may be brought to bear on medicine. The idea of the five divisions, Caucasian, &c. &c., is utterly insufficient even in Europe, we still find numerous examples of races possessing most striking dissemblances, though living under climates little differing, and possessing them now, just as markedly and no more so, than at any period of which we have historic-knowledge:—thus the Latin Colonist of Wallachia, or the very primitive Szeckler of the Carpathians, driven to his present abode on the first appearance of the Roman legions in Pannonia; the peasantry of the Graubunden, still speaking the language of the Troubadours; the Irish of Connemara; and the German family, differ most intrinsically from each other, have done so immemorially, and will continue so to do. But not alone does the Caucasian variety offer these examples, the Ethiopian also does so, the sub-variety of the Melaniens—"Boschjesman," already mentioned, the Kafirs, the Normans of Africa, the Minas or Gold Coast Negroes, and the Monjol Negro, are all distinct types:—this last named negro, has often scarce quadrupedal instinct; he remains often during a long life, in the midst of other blacks all speaking Portuguese, and at its close, he will be found to have acquired but the words which express the first and most simple wants. Were I illustrating in detail the many differences which remove among themselves the Negro tribes as wide apart, as the whole Negro race is from the Greek or Norman, I might remark on the commercial tastes of the Negroes from the Guinea coast, which makes them invaluable as quitandeiros or market men; their impatience under slavery; their possession of the art of writing, apparently, a rude Arabic character; the greater influence which Mohammedism exercises over their religious belief, than over that of the other tribes; and the facility with which, when in numbers, as in the province of Bahia, they organise themselves into formidable secret societies. Then of the Kafirs, how much might not be told? a race, daring, cunning, faithless, addicted to plunder, but yet of great capabilities, at present used for the purposes of different rival missionary societies,—irreducible to slavery, but themselves slave holders. Their chiefs have often been as famous as many conquerors of the old world, and they, about thirty years ago, possessed a warrior-prophet, who had nigh become the Joshua, or Mahommed, of South Africa. The name of this remarkable man was Mokanna, or the Lynx; in 1819 he delivered himself up to the English, but soon after escaped with four companions; some of the party were drowned, and the English Governor insists that Mokanna was among the number, a fact strenuously, and with some show of truth, denied by the Kafirs, who, (like the Portuguese peasant still looking for the return of Dom Sebastian from Paynimry, or the Styrian who expects one day to see the Emperor Frederic Barbarossa issue forth from the cavern where he and his court are still spell-bound,) believe in a future reappearance of the Lynx; and from time to time the whole Cape frontier is thrown into excitement, by the arrival of wandering parties from the distant interior, who, ensure themselves a favourable reception by delivering pretended messages, promising aid and his presence among them, from the lost prophet. Yet, this tribe of Negroes was originally, a native of the worst parts of Africa, and is but an intruder of a very recent date, into the more favoured regions of the Southern extremity of that continent, from which, much more than the Dutch colonists, it has extirpated almost wholly the legitimate inhabitant. This, is satisfactorily proved, by Lieut. Donald Moodie, R.N., in his edition of the records of the Cape of Good Hope Government, since 1652, in so far as regards its relations with the coloured Tribes; a work of high interest, as the only authentic record of the mutual influence of the white and coloured races when brought together in the colonial world. I might also dwell on the wide difference between the scarce articulate language of the Hottentot, and the so much more perfect languages of the tribes of the great Ichnana family, which Doctor Adams of Cape Town, endeavours to prove are closely allied to the Indo-Persic tongues. The differences in the physical form and relative development of the various elementary parts of the body, among the various European families, does not require illustration, but, to most readers it will be a new fact to hear, that among the Negroes proper, the races I have already named, and many others of which I might speak, differ among themselves as markedly, as does the noble Magyar race of Hungary, from the ugly and ill-made peasant of those parts of Germany, where relics of the great Hercynian forest remain, and where the German type is to be found in its greatest purity:—thus, the Minas, the Kafir, Negro, those from Loango and Angola, present well raised brows, Roman or Grecian noses, an erect bearing, shewing a centralisation of the Cerebro-rachidian system, and the opposite, in all points, to the physique of other tribes, as the Monjol, and those which come from the interior, to embark at the embouchure of the river Congo, in whom the predominance of the vegeto-mucous organs, over those of the nervous system of relation, is such, as almost to prevent the action of the latter. The Ethiopian division, gives in a word, examples of races which occupy a similar place to the Greek and Norman races, and others also, in whom, as in the purer Saxon races, "*c'est le Boeuf qui l'emporte sur l'ame.*" Again, I have ever remarked a better physical development and more exalted moral nature among the upper classes of any tribe, who, through the fortune of war become slaves, than in the *tiers état* of the same tribe, whom hereditary slavery had endued with the *morale* and even the language of the muscles, which we find among every enslaved people, and which Bulwer Lytton, in his character of the Jew, in the Siege of Granada, has admirably succeeded in painting. This last class really view with delight their transfer to the ownership of the white by their native hereditary master, and hail it as a sort of promotion. In all the tribes, I find an inferior physical development, and a vitiated moral disposition to go hand in hand; and a curious instance of this, is the powerful muscles of the lower jaw, observed in those tribes, whom their fellow captives accuse of cannibalism.

Now, all which precedes, has valuable applications in medicine—leaving out of view facts to be drawn from European observation, such as that a Scot of the Lowlands will take two ounces as an ordinary purging dose of sulphate of magnesia, while, for a French adult half an ounce will produce in general, the same effect—it is in the treatment of native Africans, that we ought ever to keep in mind the race; for the more degraded is the tribe to which they belong, the less vital reaction appears, the disorganising agency of disease being so much the greater, and the vis medicatrix naturæ affording the less assistance to medical treatment: and while depletions or depressing medicines are badly borne, stimulants and strong warm purges are highly needed, the latter to free the actively secreting mucous intestinal membrane from its slimy coating, and the often engorged state of its vessels. The higher tribes may be treated with few modifications, as may ordinary whites in the same circumstances, and the mortality among them is much less than among the inferior tribes; in these latter, the incapacity to struggle with disease, and the listlessness shewn under it, are instances of the force, which the sentence of subjection to the blighting agencies of this material universe, imposed on man at the fall, still exercises over them; while other races have advanced far in their reconquest of external nature, and their power of conforming their habits, &c., to the external standard of its immutable laws. The diseases of the native African are chiefly those produced by terrestrial and planetary agencies, and affect almost exclusively the mucous and dermal tissues, and the blood; and here I may be allowed a criticism on Smollett, who, in his "Rhoderic Random," making his hero take medical charge of a slaver, from the Gold Coast to the Antilles, represents a considerable mortality from *putrid fever*, as having occurred among the negro passengers; from which expression, if he means us to understand a typhus produced by animal poison, I certainly strongly doubt the probability of such an occurrence, universal experience shewing that under the circumstances where whites would be attacked by typhus, as it existed in the middle ages of Europe, or as it is still found among the Irish or Hungarians, the negroes and those other tribes, who, receding much from the Georgian or Grecian type, are endued with less vital cohesion of tissue, are attacked by virulent dysenteries, and the whole train of scorbutic and other primarily atonic diseases.

Another interesting application of this subject offers itself, which may be found fruitful: It is, that perhaps certain discrepancies in the history of cases and difficulties of theory, as found in the Hippocratic books, with what is observed at the present day, may in this way be explained; for example, in the case of crises and critical days, now, confessedly a doctrine not of so self-evident a nature, as it seemed to the Grecian physicians, may it not be, that among a race so elevated in the scale of the physical and moral hierarchy of man, all the vital actions had a natural perfection, and force and harmony, which, in other races, and under more complicated modes of existence,

they have ceased to possess. I shall not now pursue further this idea, nor the many co-relevant ones, but conclude in the forcible phraseology of C. Lamartine, that, "Il y a là une abime le pensées et de meditations."

City of Campinas, province of San Paulo, Brazil, February, 1846.

HOSPITAL REPORTS.

KING'S COLLEGE HOSPITAL.

Case of Trismus.

Reported by HENRY SMITH, ESQ. House Surgeon

Elizabeth Croose, aged 25, unmarried, came to the Hospital on the 3rd of July, with the following symptoms; her teeth were completely closed; she was unable to separate them, by any effort on her part; there was great pain below the left ear, and underneath the left side of the lower jaw which was greatly increased by any attempt to separate the teeth: she complained also of severe shooting pains on the left side of the face, and temporal region of the same side; the superficial glands under the jaw were enlarged and painful; her face was pale and bloodless, and presented the appearance of anxiety and bad health. I learnt from her the following history: twelve months ago, she had an attack of severe pain in the same situation, which was followed by almost perfect closing of the teeth; she had previously been in bad health; her business was that of a dressmaker, and she was confined much in-doors, at work: she applied to a medical man, who ordered fomentations to the face, and hot air baths; under which treatment she gradually improved, and she was able to open her teeth, but not to any great extent. She continued in rather delicate health until last January, when she had a recurrence of the attack; the teeth being very nearly closed, and the pain great. Her health became deranged; she suffered from languor and weakness; she was seen by a hospital surgeon, who ordered her tonics, viz., the cold bath, exercise, and steel. Her health improved, gradual relaxation of the jaw took place, and she was enabled to separate her teeth well; she continued in pretty good health up to the present time, July 3rd, when I saw her, labouring under the before-mentioned symptoms. Judging from the history of the case that the Trismus was owing to some local irritation, acting upon a nervous and weak constitution, I determined to use local treatment, combined with general antispasmodics and stimulants: I ordered six leeches to be applied below the ear, to be followed by fomentations, and a mixture composed of Dec. Aloes. Co., Tinct. Assafœtidæ, and Spirit of Ammonia, and a sedative of Opium and Camphor at bed time.

July 4th. Has passed a more comfortable night, from the opium; but she complains of great pain about the jaw, and the Trismus is quite as obstinate; she can take nothing but liquids; the pulse is rapid and feeble, countenance very anxious, bowels confined, there appears to be no spasm of the masseter muscle: ordered a blister below the ear, and the raw surface afterwards to be sprinkled over with gr. ij of muriate of Morphia; wine and arrowroot, to be taken occasionally. Mag. Sulph. ℥ j. to be added to the mixture.

July 5th. Has passed a very restless night; is in very great pain; she has only experienced temporary relief from the local applications; the pain attacks her in paroxysms, and her sufferings at those periods appear dreadful; she is considerably exhausted, and in an anxious state of mind; the teeth keep firmly closed together. She complains of soreness in the throat, and experiences difficulty in swallowing liquid; the pulse is rapid and feeble but there is no febrile disturbance. The bowels have been well opened. I determined to try the effect of cold water, poured from a height upon her face, but it did not appear to produce any effect. As she was much exhausted, and could take no solid nourishment, I ordered her to have wine and arrowroot frequently.

July 6th. On entering the room, to my great surprise, I found her sitting up with a cheerful countenance. She expressed herself much better, and I was at a loss to account for her sudden improvement, when she gave me the following account: Suddenly, in the night, she *felt something burst in* her mouth, and found herself almost choked by a quantity of matter, which she was unable to eject; this was followed by great relief to the pain, and relaxation of the jaw. She was enabled to eat some solid food. The teeth have separated, but not to any extent; she still complains of great languor, and she suffers pain under the jaw still, but it is not severe. The superficial glands are enlarged and tender. I ordered four leeches to be applied, and a dose of quinine to be taken twice daily, and what nourishment she was able.

July 8th. Is much better, she can open her teeth still more, she has only some occasional shooting pains on the left side of the face; empl. lyttæ below the ear; she eats solid food, and she is getting stronger.

July 12th. Is rapidly improving; she has been able to go out for a walk; her strength is returning; the teeth have separated more, and she does not complain of pain.

July 27th. I happened to see this young woman, when I found her health restored; her teeth have separated further, but not to the extent that they had before her last attack.

This case presents some interesting features. I believe it is a rare occurrence to meet with perfect Trismus alone, except in Hysteria. Contraction of the jaws occasionally results from inflammation of the joint, or from caries of the bone, but these cases are generally permanent. From the sudden termination of this case, from the symptoms of irritation about the jaw, and from the account she gave me, I think there can be no doubt that some abscess had formed about the jaw, and had suddenly burst. Although I suspected some mischief then, I must confess, that I considered, from the previous history, and from her having been cured in the last attack solely by means calculated to improve her general health, that it chiefly depended on constitutional causes, therefore I chiefly attended to the constitutional treatment, although I did not neglect the local treatment, by leeches and blistering, which probably had the effect of bringing about a more speedy resolution of the abscess.

The Queen of Spain has lately issued an important letter respecting quarantines. The quarantine of observation of four days, hitherto imposed on all vessels arriving from Maroc in a Spanish port, with a clean bill of health, will be omitted, for the future, in the case of Spanish ships, provided no case of plague shall have occurred in the port from which the vessel sets out, or its neighbourhood, during the space of one year. Foreign vessels will be required to present a certificate to this effect from the Spanish Consul of their sailing port, in addition to a clean bill of health, without which the old regulation will continue in force as regards them.

The King of Saxony has established a Royal Academy of Science at Leipsic, in commemoration of the two hundredth anniversary of the birth of Leibnitz, which took place at Leipsic on the 3rd of July, 1646.

A PRIZE ESSAY ON PURULENT ABSORPTION.

Communicated to the Medical Times

BY THOMAS OTTREY RAYNER, M.D., F.S.A.

(Continued from p. 384.)

I come now to consider one of the most important points of the subject; viz., the question, Upon what do the symptoms observed in purulent infection of the blood in the human subject depend? Are they due to any poisonous property of the pus itself? or to the secondary lesions it produces? or to other concomitant circumstances? I do not think I can better commence this part of the subject than by stating briefly the experiments and conclusions contained in a very remarkable paper by M. D'Arcet; an abstract of which is to be found in a late number of the *British and Foreign Medical Review.*

M. D'Arcet, reflecting upon the numerous and complicated symptoms which occur so often during the course of the disease, comes to the conclusion that they must be due to some cause additional to the constitutional disturbance necessarily attendant upon the formation of the abscesses themselves. In order to arrive at something definite, he performed the following experiments. Healthy pus being exposed to the action of the air, or of oxygen gas, purified and separated into two portions; the one an amorphous mass, formed by the coalition of the globules, and which floated at the top; the under part fluid, soluble, of a yellowish colour, fœtid, and containing sulphuretted compounds. Having washed the first portion he injected it, in what quarter is not stated, into the veins of a dog. The operation was generally followed by death in forty-eight hours, the animal having merely appeared dull, and suffered from dyspnœa, but no diarrhœa nor typhoid symptoms having supervened. On inspection, abscesses and phlyctenæ in the lungs and other parts were discovered. Injection of the subjacent soluble part caused severe typhoid symptoms, hiccough, vomiting, diarrhœa, rigors, fever, dyspnœa, depression, stupor, involuntary evacuations, hemorrhages from the mucous membranes, prostration, and death in five or six hours. The inspection revealed phlyctenæ in the lungs and other organs. He also injected healthy pus in 11 or 12 instances; but in two only disseminated abscesses formed. In the majority the typhoid symptoms occurred. In order to avoid fallacy, he used in some instances pus, procured by means of setons from the animals experimented upon, but without any difference in the results. From these experiments he deduces the conclusion, that pus in the blood produces two separate effects:

1. A disease of the respiratory, hepatic, or other organs, a local inflammation dependent on a mechanical cause, the capillary tissue being embarrassed by the insoluble or pulverulent principles developed in the pus, by its exposure to the oxygen of the air in the lungs; and not producing any other constitutional effects than those of inflammatory affections of the organs.

2. A miasmatic poisoning, caused by the absorption and circulation of some principles of the pus itself becoming putrid, acting on the blood in a specific manner, and producing grave and general symptoms, especially characterised as adynamic, and such as indicate a class of diseases where the entire organisation is intimately deranged, as the plague, typhus, purpura, glanders, &c.

Now, I agree with M. D'Arcet that many of the symptoms which precede death from purulent infection in the human subject, are often not to be entirely accounted for by the local lesions discovered; and I agree with him in looking upon infection of the blood by putrid or other unhealthy matters as affording an explanation of many of them. But I cannot agree with him as to their source; nor do I believe such symptoms to occur so generally as he appears to think; that is to say, I think that in many, even most, of the cases, the symptoms are sufficiently accounted for by either the preliminary or secondary local affections. The reasons for my dissent from his views are:

1. Because the serum and fluid constituents of pus, which soonest undergo decomposition, are readily excreted by the kidneys and other emunctories, and thus removed from the influence of the air.

2. Because the pus corpuscles, which resist putrefaction for a long period, are either arrested in different parts of the system before that change can take place; or being dissolved in the serum, are quickly excreted, as appears from the experiments, in which injections of small quantities of pus, were in a few days quite recovered from

3. Because the putrid symptoms in the cases in which they occur, are almost invariably to be explained by concomitant circumstances.

4. Because the results of my experiments differ very remarkably from those of M. D'Arcet, in one particular—the injections of healthy pus were never followed by the typhoid symptoms remarked in his cases; dulness, stupor, and dyspnœa were the only important ones observed; while in one which I made for the purpose of comparison, an injection of a very small quantity of putrid pus occasioned symptoms of a markedly different character, death following in about six hours. My experiments, however, being less numerous than his, do not afford results of equal value; a repetition of them may possibly lead to a change in my opinion. In the mean time I beg to call attention to the following tabular arrangement of 12 cases of phlebitis, and to the inferences to which they lead:

Author quoted, primary disease	Date of Seizure.	Possible Exciting Causes.	Symptoms in the order in which they occurred.	Date of Death	Lesions found at the original seat of injury.	Secondary or consecutive lesions.
Dance Arch. Gen. Obs. VI. Parturition.	10th or 12th day.	Drinking cold water while sweating.	Rigors, lassitude, dry tongue, diarrhœa 17th violent rigor, vague delirium, trembling tongue, P frequent R 40. Meteorism, incoherence.	18th day.	Uterus full of fœtid sanies, veins about the attachment of the placenta full of pus, also ovarian and hypogastric veins, softening of the uterine substance.	Inferior lobes of lungs full of abscesses, double pleurisy. Suppuration in symphisis pubis.
Dance Obs. VII. Parturition	9th day.	Too light clothing.	Irregular shivering, suppressed lochia, fever, diarrhœa, oppression, fœtid oozing from vulva, P. frequent, pain in abdomen, low delirium, subsultus.	24th day.	Uterine sinuses and ovarian and hypogastric veins filled with pus, softening of the tissue of the uterus.	Traces of peritonitis, pleurisy on the right side. Numerous abscesses in lungs. One in spleen. Pus in finger joint.
Dance Obs. VIII Parturition	9th day.	Exposure to cold.	Shivering, suppressed lochia, fever, diarrhœa, altered face, sanious oozing from vulva answers uncertain; no complaint; P frequent; dry T low delirium, dyspnœa	31st day.	Left uterine sinus and ovarian vein filled with pus. Blackness of Fallopian tube and ovary. Inflammation of peritoneum of the pelvis.	Double pleurisy, numerous small abscesses in the lower lobes of the lung. Softening of spleen and liver. Engorged cerebral vessels. Lymph effused under piamater.
Dance Obs. IX. Parturition	2nd day	None mentioned.	Shivering, diarrhœa, pain in head, and hypogast. for 20 days then general uneasiness; thirst, dry tongue, lochia scanty, P 120, then jaundice dyspnœa, involuntary stools no complaint	29th day.	Peritonitis, uterus full of yellow pus. Uterus spotted red. Two tumours external to uterus formed by the enlarged and purulent ovarian vein.	Slight injection of the piamater. False membrane the size of a crown piece on lower lobe of its lung. Two small abscesses in the same lung.
Dance Obs. III. Parturition	4th day	Labour long and laborious	Shivering, fever cephalalgia, hot dry skin, pale tongue, belly supple, lochia scanty, fetid P frequent, red conjunctiva, trembling	15th day	Softened and violet coloured neck of uterus. Uterine sinuses, large and purulent, losing themselves in the tissue of the organ. Softened Paterus.	All the organs natural
Hodgson Venesection for Ophthalmia	Not mentioned	None mentioned.	Gradually increasing fever. On 17th day, P. 20, skin hot, dyspnœa prostration; wound in vein open; pain in arm, symptoms increased, delirium.	7th week.	Cephalic vein thickened, obliterated from two inches above puncture to shoulder. Int. jugular enlarged, thickened, indurated. Ext jugular and sub-clavian purulent.	Small abscesses in the lungs, pleurisy; more serum than usual in the ventricles. Piamater tinged.
Rose compound fracture of leg.	12th day.	Erysipelas treated by incisions	Rigors, sickness, P 120, fever, dry T, hot throat, painful abdomen, stupor, insensibility, contracted pupils	20th day.	Erysipelas spreading all over the leg and abdomen. Incisions. No attempt at union of fracture	Piamater and brain more tinged than natural. Several abscesses in lungs. Two in liver. Two under capsule of spleen.
Rose. Fract. fibula Puncture in sole of foot	19th day	Erysipelas with diffuse cellular inflammation, incisions	Rigors returning for several days, and simulating ague, pulse quick, tongue dry, sweating, Ptosis, face yellowish.	26th day.	No account given of the state of the wound. Convalescent from the erysipelas	Opake arachnoid Lymph on under surface of ant lobes of cerebrum, and round junction of optic nerves. Suppuration into and round sterno-clavicular joints. Numerous small abscesses in lungs. One in liver
Dance. Obs XV. Amputation of mamma for cancer.	12th day	None mentioned.	Violent rigors, face sweating thirst; dry tongue prostration; answers slow, jaundice, pulse interrupted, pale at base of lungs; extreme feebleness, pulse insensible.	21st day	Pus in radial and ulnar veins, their walls thickened, pus in medulla of the bones. Several abscesses in the muscles. Many small veins inflamed.	Five or six small abscesses in each lung. Double pleurisy with effusion of lymph and serum. Red injection of cæcum
Arnold Venesection for pain of back.	Inflammation in puncture next day.	Perhaps epidemic.	Inflammation in wound pain in chest on a full respiration; pulse frequent, restlessness, thirst, swelling of arm, purging, rigors, weakness, irritability; pulse 120, prostration cough, delirium, dyspnœa.	30th day	Basilic and median-basilic veins impervious Small abscess in former above this it was lined with irregular false membrane.	Several vomicæ in lower lobes of lungs Some yellowish serum with lymph in pericardium Arachnoid opake, thickened, and milky. Several oz. of serum in ventricles. Abscess containing fœtid pus in substance of deltoid muscle
Arnold. venæsection 5 times for epilepsy.	Day after last bleeding.	None mentioned.	Pain and swelling in arm, skin yellowish; fever, dry tongue, great pain in arm; prostration; no pain in chest; dyspnœa.	7th day.	Whole length of cephalic vein full of pus; its coats hard, thick and red. Two inches of radial purulent.	Infiltration of pectoral muscle with greenish pus. 10 ounces of opake serum in the pleura. Both lungs full of hepatised portions, some purulent. Arachnoid opake, thickened and indurated.
Dance. Obs. XX. Ulceration opening the ductus choledochus, with mesenteric vein.	6th week.	Entrance of bile into the circulation.	At first, gastro-hepatic symptoms, then suddenly rigors, fever, swelling of the shoulder, forehead, and left temple, and diarrhœa, phlyctenæ and eschara about forehead, with oozing pus; teeth covered with sordes; prostration, low delirium.	21st day after seizure.	Ulceration of mucous membrane of gall bladder. Several ulcerations of choledochus opening the neighbouring large veins. Ulceration round embouchure of choledic duct.	Immense disorganisation about the head, with pus in the veins. Sinuses of dura mater gorged. Shoulder and elbow joints purulent. Lobular pneumonia, with abscesses in the lungs. Abscesses in the liver. Portal and mesenteric veins, purulent; splenic, and pancreatic veins purulent.

I have selected the above cases from the great number recorded, on account simply of the completeness of the reports furnished.

Now let us first consider them with reference to the symptoms of contamination of the blood by decomposed matter. Those enumerated by M. Bonnet, in his lectures on this subject, which will be found in the 21st vol. of the *Medical Gazette*, are "rigors, fever, acceleration of the pulse, loss of strength, very fœtid diarrhœa, pale yellow face." All these, with the exception of diarrhœa and yellow tint of the skin, are common to most extensive inflammations, and even the two excepted may be produced by a great variety of causes. Looking over the cases given in the foregoing table, we find, in three of the cases of uterine phlebitis, the coexistence of diarrhœa with a fœtid condition of the lochia or other contents of the uterus; in another diarrhœa, but the only mention made of the state of things within the uterus is that the lochia were scanty; in another the lochia were scanty, but there was no diarrhœa.

In two only of the other cases of phlebitis is the occurrence of diarrhœa noticed; in one of these there was a large abscess in the substance of the deltoid which contained fœtid pus; in the other, the primary lesion consisted in a cancerous communication between the mesenteric vein and the ductus choledochus, with ulceration of the mucous membrane of the intestine about the opening of this duct. Yellow tint of the skin is a symptom to which no importance can be attached in cases of phlebitis, on account of the local changes so often suffered by the liver. With regard to the other symptoms, I cannot find, after a careful study of the cases, any which the extent and situation of the lesions primary and secondary do not fully account for. I shall forbear, for the sake of brevity, to enter into any special illustration of this, but I believe that if the judges of this essay think it worth while to consider them attentively in this point of view, that they will coincide with me in opinion.

The inferences to be drawn from the above considerations are:—

1. That all the symptoms observed in cases of phlebitis with disseminated lesions are due either to the lesions themselves, or to some peculiar circumstance concomitant with each case.

2. That consequently no other effects are attributable to healthy pus circulating in the blood, than those caused by the embarrassment to the circulation, and to the local lesions to which it gives rise.

To render this essay at all complete, it will be necessary to enter briefly upon the consideration of a few of the complaints, the pathology of which, the facts that have occupied the foregoing part of it, tend to explain. The first and most important of these is cancer. Cancerous disease, under which name I include schirrus, medullary sarcoma, and colloid cancer, may develope itself in almost any organ of the body; but it commences by far most frequently in the female uterus and mamma. The tumour is at first circumscribed and confined to the organ in which it originates, but it increases with less or greater rapidity according as it partakes of the schirrus, or encephaloid character; it exhibits a tendency to involve indiscriminately, all the tissues in its neighbourhood. As the disease progresses, the tumour softens and inflames at various points of its substance, and at length bursting through the skin, forms a foul irregular ulcer with everted edges. At the same time with these latter changes in the primary growth, the glands in its neighbourhood become enlarged, and the same series of changes takes place in them. In the course of time, symptoms of affection of numerous other organs are developed, and the patient expires from the accumulated suffering and disease. After death cancerous growths are discovered in the lymphatic glands, the lungs, the liver, the bones, the muscles, the serous membranes and the skin; the spleen, the kidneys, and the eyes are also very common seats of secondary tumors.

The symptoms of these scattered growths commence sometime after the first tumour is developed, and generally date from its softening; they show, upon examination, evident marks of more recent production. When they are numerous, their development may be traced through all its stages, in the same subject.

It is a point of much importance to determine the actual tissue in which the secondary disease commences. Cruveilhier considers himself to have accomplished this with regard to the liver: and we may infer that it is the same in all other organs. In the most newly formed growths in the liver, it is easy to see that the disease is circumscribed to a few granulations, and the granular aspect of the liver is preserved. Cancer therefore commences in the substance of the granules. But their structure is very compound, and it is necessary to ascertain what anatomical element forms the

primary seat of the disease. Cruveilhier believes it to be the venous capillary system, for the following reasons.

1. "Because the veinules are very commonly seen filled with cancerous matter; and because it very often developes itself in great abundance in large veins, why not therefore in small veins also?

2. If we attentively examine a section of a cancerous tumour, and apply gentle pressure, cancerous matter oozes from the cut orifices of the vessels, in the form of small worms. That these vessels are veins, he was, in one specimen, enabled to demonstrate by carefully dissecting one of the larger ones into its minute ramifications, when he found the cancerous degeneration limited to the vena portæ.

3. An experiment by Prof. Berard, who found that an injection thrown into the arteries of a cancerous tumour coloured the whole mass, but he was unable to make it penetrate into the veins, these being blocked up by cancerous matter.

(To be continued.)

REVIEWS.

Outlines of Naval Surgery. By John Wilson, surgeon, R.N. 12 mo., p.p. 134. *Edinburgh*, 18[illegible].

This work professes to be nothing more than an epitome or outline of the subject it embraces, and in such light deserves commendation. Naval surgery, in all its bearings, has been so variously discussed by authorities competent to its correct teaching, that little of novelty remains to be said upon it. Nevertheless, as new facts and discoveries are not often to be looked for in matters appertaining to medico chirurgy; in the absence of such things, we are bound to feel obliged to those who bring summarily, and at a single view, before us, truths, which though not new, are of every day applicability and service. It is in this light that we are disposed to regard favourably the "Outlines" of Mr. Wilson. He writes like a practical man, and we therefore value his facts for their intrinsic importance, notwithstanding that they are now and then dressed in a garb, the reverse of epigrammatic or graceful. Here is a sentence for instance, in the dedication, which Cobbett's perspicacity and literary point would have prompted him to grumble at right well, had it fallen in his way.

"It seems unnecessary to state, at this moment, what may be the importance of the subject herein, however imperfectly treated, to, or its connection with, the best interests of the British as a maritime nation—health is strength—without it, it is easy to see, no ship, and no fleet can be efficient or capable of doing their duty."

We do most earnestly hope to see the day, when English literature will be more regarded by those who deal with it; and when authors, knowing how to cut and carve their sentences, may present them to us in such a form, that they will be intelligible at a single reading.

Mr. Wilson is a non-contagionist on the subject of "Febris intertropica violenta."

"Infection," say he, "succeeds, never precedes disease, therefore must be a property, or something acquired or engendered during or under disease, a secondary, therefore, not a first cause. From some source or cause this first case must have proceeded, but not from infection, to which it must have been prior, anterior, or pre-existent, and of which, therefore, it necessarily was and must have been independent. Is this fever subsequently or secondarily infectious? Can it be brought into existence by an endemic or epidemic cause, or some contingency, and then, by infection or some hitherto unknown process in the living system, radiated? In secondary as well as primary infection, there is much that is fallacious. For instance, had any party of men gone on board the Pyramus, to do duty in her enfeebled and sickly state, and a very probable proceeding, the most likely of all things would have been that most or all of them, according to their several susceptibilities for (of?) disease, and however inured or seasoned to the climate, or their own ship, would have been attacked with fever, and according to their several stamina, or powers of recovery, recovered, or their morbid predisposition, died, and what then would have been said? Just what was said in the case of the Eclair, and what has been said in a hundred others before, that the disease sprung from, and was continued by, infection, wh[illegible] in reality infection had nothing whatever to do [illegible] either with its origin or continuance. It would not have been imputed (supposing the cause not to have been found out) to deposition or decomposition—a want of cleanliness, a want of ventilation, or discipline, the cause of nine out of ten cases of fever or disease among seamen; but to a something no one could see, or no one could find." (p.p. 102—103.)

The following observations concerning frequent sources of impurity, or of infection, in ships, are very judicious and well-timed.

"The introduction of wood, green, rank and full of sap, into a ship's hold, in a tropical climate, and particularly during the rainy season, is a proceeding to be by all means reprobated, being, to say the least, perilous in the extreme, and much more so than is commonly imagined or thought of. To this may be attributed, and with reason, many of those cases of fever, so intractable and fatal, and in hot climates so frequent, and probably that of the Eclair. As still further illustrative, another sample may be given. In the year 1815, the Regalia, a merchant ship, went on a trading voyage to the coast of Africa. This case, it may be remarked, is related by Dr. Ferguson, army inspector of hospitals. When she sailed from England, the ship's crew were all healthy, and so continued all the voyage, and all the time they were there. Headachs, and other trivial cases of that nature, occurred from exposure to the sun or weather, but nothing further. Previous to leaving the coast, she wooded, and a large quantity of it, green and vegetating, cut in the woods on shore, was taken on board, and all stowed below, of course in an atmosphere, hot close and stagnant. The ship was bound to Barbadoes. Up to the time of her leaving the coast, and for about a week after, she still continued healthy, but from this, cases of fever, and both violent and intractable, began to appear, and spread rapidly on, about two weeks more from this time, on her arrival at Barbadoes; from the ravages and rapidity the disease had made, she was then found in a condition the most deplorable and alarming, several of the crew had died, several more dying, and all more or less ill. The cause and circumstances of the case became immediately the subject of investigation.

"On clearing the ship, and which was immediately, and very properly undertaken, it appeared that the wood in the bottom of the hold, which had been green and soft when taken on board, had become in this short space, that is, in about two or three weeks, through heat and confinement together, putrid and decomposed. From all parts of the ship's hold, effluvia, fetid, offensive and noxious, issued. The ship was cleared, cleaned, and ventilated, and the disease of course, disappeared. Wood, it is here particularly to be remarked, introduced into a ship's hold, whether for firing or other puposes, ought to be incapable of change, dry, hard, and particularly in a tropical climate. Soft, green, and vegetating, cut from the forests on shore, and stowed below, as it commonly is, is a proceeding most perilous, and one which, it is necessary to say, cannot be reprobated too strongly." (p.p. 114—116.)

We think this work very well calculated to be of service to the class of practitioners to whom it chiefly addresses itself.

Lectures on the Urine, and on the Pathology, Diagnosis, and Treatment of Urinary Diseases. By John Aldridge, M.D. 8 vo. p.p. 80. *Dublin*, 1846.

We are not told, by the author, in what place, or under what circumstances, these lectures were given. But for their denomination, we should be inclined to regard the whole as an essay, rather than a series of public discourses. Even the formality of heading each article, or lecture, as the case may be, by the usual starting-word, "Gentlemen," Dr. Aldridge dispenses with. Our author is a lecturer on chemistry, and in so far as the chemistry of his subject bears him out, he might have addressed a class at the Medical School, Park-street, Dublin, upon it, and then it would have been wise in him to say so; but additionally to the chemistry, we find a sprinkling of natural and morbid anatomy, with an occasional touch of treatment. As we do not learn from the title page that the author is physician to any public institution, we conclude that the discourse was not clinical; and as he publicly lectures on nothing but chemistry, we are at a loss, as we said before, to find the scene, or the occasion of these labours. We say thus much, because we feel assured Dr. Aldridge is a man of too much consequence to denominate himself other than what he really is. In the present day, there is a great rage for lecturing; every man gifted with a small amount of vocal or penfluency, feels himself in a position to lecture—that is, to TEACH. Many there be, who try thereat, and few there be, who accomplish it. We have even known a man ape the position of, and self-denominate his insignificant entity, lecturer on clinical medicine, because he ran to the beds of a few old men and women, *gratuitous patients*, in certain alleys and corners of a large town, followed by one or two school boys, who knew no better than to listen to his nonsense. Idle absurdity like this, we shall ever condemn, when we find occasion for it. In all practical points, Dr. Aldridge's pamphlet does him much credit. It makes no pretentions to scientific depth, or to originality; but it is an excellent *resumé* of all previously written on the pathology of urine. The style is simple, unpretending, and exact—the facts comprehensive, and what is much more, *comprehensible*—and the applications clear and judicious. To the practioner uninformed on this subject, and especially to the student, we have much pleasure in recommending this monograph, as one of the best elementary treatises extant, on the pathology, diagnosis, and treatment, of urinary diseases.

TO CORRESPONDENTS.

Humilitas *should either become a subscriber to the General Medical Annuity Fund, or insure his life.*

A Subscriber *will find full information respecting the requirements of the College of Physicians, in either our last Student's number, or our Almanac for* 1846. *A printed copy of the questions at the last examination will be forwarded on application to the registrar, and from it* a Subscriber *will be able to form a better general idea of the nature of the examination than we can give in the limited space of our correspondents' column. Pinel's work on the nature and treatment of insanity, is decidedly the most valuable in any language, and* a Subscriber *may well imagine that it has lost nothing by its being transferred, in an English dress, to our pages, under the care of Dr. Costello, the learned Editor of the Encyclopædia of Practical Surgery, himself the proprietor and superintendent of a large and ably conducted lunatic asylum.*

Un Allemand, *if ill, should consult a medical man, if not ill, he had better not take medicine. We never prescribe in the* Medical Times.

Alpha.—*We think not.* Alpha *himself answers his second question.*

A Constant Reader *should have sent us his name. Anonymous personal attacks should always be avoided. A member of the College of Surgeons, and M.D. of a Scotch university, cannot certainly be considered an unqualified practitioner. Such distinctions are obsolete, they belonged to a less enlightened, and less generous age.*

Mr. J. J. E. Foster's *attack is too personal for our pages.*

An Irish Subscriber.—*Only twelve meetings are held of the Surgical Society of Ireland. They all take place during the winter Medical Session. The Pathological Society of Dublin meets weekly during the same period. Valuable papers are read at both societies. We do not know the terms of membership. Full reports of the proceedings of these societies are published in the* Medical Times.

A correspondent warns us against a practice advertised to be sold at Birmingham. He affirms it to be a quack affair of a disgraceful kind.

Miles *writes us a long letter on the Flogging inquest. He asks what Mr. R. Wilson means by connecting as neighbours the sixth and seventh pieces of the spine with the sixth and seventh ribs, in his report; insists that the pretty piece of nonsense about* ruptured *muscle, and pulpy softening, is proved to be moonshine by the fact recorded by Dr. Warren, that there were no convulsions, and by the fact that the muscles on post mortem examination, were found healthy by four other medical men. He goes on to enlarge on the coarse jokes and fits of laughter enacted or provoked by the dignified coroner, on the self-puffing à-la-Goss of Wilson, and other remarks which we have anticipated elsewhere.*

A Fellow *sends us the report of* " *The Fellows Dinner*" *given at the Free-Masons' Tavern immediately after the election of the Councillors. Mr. Travers, was in the chair. The only incident of importance was a forcible declaration by Lawrence that the Council would resolutely persevere in their unpopular courses if supported by the Fellows. The declaration was received with enthusiasm. There were about 150 Fellows present. Mr Green was one of the speakers.*

M.C. *We do not give prescriptions.*

THE MEDICAL TIMES.

SATURDAY, AUGUST 1, 1846.

" See how yon justice rails upon yon simple thief. Hark, in thine ear: change places; and handy dandy, which is the justice, which is the thief? *** Get thee glass eyes; and, like a scurvy politician, seem to see the things thou dost not."—LEAR.

NEVER were we more convinced that, in the indignation at a large abuse, all sense of its minor contingencies is often prejudiced and marvellously misled, than while ruminating on the circumstances of the late inquest on White, the alleged victim of flogging barbarities. As a whole, such a gross, perverse, and hideous caricature on English administrative justice, in the name of justice, we never witnessed. Beyond the unavoidable good of subjecting to public animadversion the Vandalism of *all* military flogging, there is not a feature presented to us *judicially* in that investigation, that commands respect, or deserves aught but censure or contumely. There was something absolutely execrable in the Coroner's farcical impersonation of judgeship. Legal axioms, and the spirit of English jurisprudence, make the judge the counsel of the accused: here the Coroner had no thought, word or act save for inculpation. Coroner Wakley *seemed* like a man compromised to infamy, or worse—personal unhappiness—if it should be proved that White died without murderous guilt in some survivor. This medical magistrate would evidently not conceive the hypothesis that some brother medical practitioner had not betrayed the trust of humanity, and proved himself an assassin. The anxiety of the merciful president of this dignified court appeared to be to clothe every act with criminality, and strip every circumstance of innocence. He *coaxes* private soldiers into conjectural charges, and tries to bully medical witnesses out of honest convictions—all to throw blood at the door of a worthy medical brother. He suggests, insinuates, applauds, encourages, assails—twists, twirls, and manœuvres—in every shape, form, and direction, to conjure up against an honest practitioner a fictitious semblance of murder! Why all this? Why this reckless sacrifice of good men's repute and peace of mind? Why this needless display of ingenuity to get up against Dr. Warren, or failing him, Colonel White, or failing him, the farrier, a colourable semblance of murder? There is of course but one reply—*Wakley wants a public sensation to help his fortunes in a forthcoming election.* There is something to excite the gravest reflection in th frightful prostitution of an English magistrac to the purposes of a popularity seeking poli tician. There is no knowing where it may en or to what perils it may carry us. The ver needs of a fiercely competing press, deprived great political events for discussion, yet requir ing for successful sustenance the aid of stron popular sensations—the very needs of such press suggest fearful dangers from this unscru pulous use, by judges, of the machinery of la to the purposes of political emergencies. No only is the whole idea of administrative justic brought into disrepute by the incongruou melodrama, but an illicit means of popula power is evoked, which, supported by anythin like character and sustained ability, would lea to very great public mischief.

Flogging is an *institution* of the army, rude an brutal, that cannot too soon be done away with If our soldiers be of so low a nature that they ar ungovernable without it, the causes of th anomalous degradation should be removed, tha our country may be relieved at once of a hor rible evil, and, if possible, a still more horribl corrective. But flogging being an existing legality to be administered by the officers o the army, with no more chance of escap than a judge of the land possesses when called on to execute the worst law on the statute book, it behoves us as a first duty in a inquiry like this over White, not withou the strongest possible grounds of inculpation to throw the inevitable evils of a bad system on those whose duties make them its administrators. Now, what are the facts of this case which distinguish it from any others occurring under the operation of military law?

First.—The sentence —150 lashes, though severe, is below the average punishment customarily awarded by military law for the offence —an assault on an unarmed superior officer with a murderous weapon, a poker. If the law be bad, correct it: while it is as at present, military judges can do nothing but enforce it.

Secondly.—The administration of the punishment was attended by no peculiar circumstances of severity. White enjoyed, it is fair to presume the customary robust health of a young English soldier on constant duty. Dr. Warren, after a minute examination, certified, under officia sponsibility, to the fact. The flogging was rfectly of the usual character: the evidence though somewhat discrepant, leaning to the supposition that it was rather lighter than severe; and Dr. Warren's non-interference favouring the hypothesis. The flogging took place on the 15th of June; the usual course to convalescence went on till July the 4th, when he was officially declared well and fit for duty; but instead of being discharged on the 6th, to his duty, as it was intended, White betrayed on that day *commencing* symptoms of some internal disease. For the first time he complained of pains in the region of the heart. After five days' illness, he died on the 11th of July, evidently of an acute disease—27 days after the flogging. Dr. John Hale, a staff-surgeon, sent down to Hounslow to see the patient on the day of his death, thus describes the progress of the disease, in a letter written on the same day to Sir James McGregor:—" White, it appears, received a corporal punishment of 150 lashes on the 15th of June, for military insubordination, which was inflicted in the usual manner in the presence of Warren, and without any degree of sev calculated to attract more than any degree of ordinary attention. His back healed kindly, and nothing occurred to mark his case until the morning of the 6th instant, the day on which he was to have been discharged from the hospital to his duty, when he began to complain of pain in the region of the heart, extending through to the back and shoulder blade, which increased in severity, notwithstanding the measures adopted by Dr. Warren for its relief, until yesterday morning, when paralysis of the lower extremities and retention of urine were discovered, and he died, as I have stated above, at a quarter past 8 o'clock this morning."

A *post-mortem* examination took place within 24 hours of the death, of which the following is the statement:—

" *Post Mortem* examination of private Frederick White, of the 7th Hussars, aged 27, made 42 hours after death, in presence of staff-surgeon Dr. Hale, surgeon Dr. Warren, 7th Hussars, and assistant staff-surgeon Dr. Reid;

" General appearance—Body muscular, and not much wasted; marks of venesection at the bend of the right arm; marks of a blister on the epigastrium, and of another on the back below the scapulæ; marks of corporal punishment across the shoulders, particularly over the right scapula, but the punishment does not appear to have been severe, and the part where it was inflicted was quite healed; back discoloured from the gravitation of blood since his decease. Thorax —right side—Old adhesions binding the lung to the ribs and diaphragm throughout its whole extent: left side—inflammation of the pleura with recent adhesions, and effusion of serum, containing shreds of lymph to the extent of 12 oz.; lung engorged and infiltrated with serum. Heart—Muscular tissue soft and friable throughout; endocarditis on both sides of the heart, the inflammation extending some distance along the pulmonary artery, and over the valves of the aorta; cordæ tendineæ of the tricuspid valve matted together with fibrine; pericardium healthy, and not containing more than its natural quantity of fluid. Abdomen—Liver enlarged, and extending three inches below the margin of the ribs, but not altered in colour or structure though there are old traces of inflammation on the peritoneal covering of the right lobe; gall bladder small, and containing a portion of pale-coloured bile; kidneys, bladder, and spleen healthy; intestines distended with gas, but healthy. Head —dura mater healthy; pia mater injected, and the tunica arachnoides opaque in several places, similar to what is generally found in confirmed drunkards; lateral ventricles capacious but empty; plexus choroides enlarged, and the veins running along the floors of the ventricles distended; substance of the brain marked with bloody points when cut into, and softened at one point on its under surface. A portion of integument was dissected from off the shoulders and spine, where he had been punished, and all the parts underneath were found perfectly sound and natural. The integument itself, with the exception of some discolouration of the cutis vera was quite healthy.

" JOHN HALE, M.D., Staff Surgeon, First Class.

'July 13."

'Copy of a Certificate which was drawn up and signed by the party present at the *post mortem* examination, for the satisfaction of the officer commanding the 7th Hussars.

" Cavalry Barracks, Hounslow, July 13.

" Having made a careful *post mortem* examination of private Frederick White, of the 7th Hussars, we are of opinion that he died from inflammation of the pleura and of the lining membrane of the heart; and we are further of opinion that the cause of death was in nowise connected with the corporal punishment he received on the 15th June last.

" JOHN HALE, M. D., Staff Surgeon, First Class.

" J. L. WARREN, Surgeon, 7th Hussars.

" F. REID, M.D., Assistant Staff Sur."

The further evidence given by these three gentlemen as to the cause of death supports the report.

Dr. Hale tells us:—" He was treated for inflammation of the pleura of the heart. There were found, on examination, old and strong

adhesions on the right side of the heart, and inflammation and recent adhesions on the left side. The pleura pulmonalis and pleura costalis were inflamed; the lungs were not inflamed. The pulmonary artery and the aorta were inflamed for an inch and a half; the pulmonary vein was very slightly inflamed. The inflammation extended from the heart to the larger vessels. There was no inflammation of the pericardium. The cause of death was inflammation of the heart and pleura, but it was impossible to say what was the cause of that inflammation. I have seen the history of the case given in the register, and I should ascribe the inflammation, to the change of temperature at the time the deceased was recovering. A change of weather, bringing rain and cold winds after great heat, took place in the end of June. A corporal in the regiment I know died yesterday from inflammation of the lungs. I do not think that the death of White had any connexion with the punishment he received."

Dr. Reid says:—"I have heard Dr. Hale's evidence, and agree in it. I look on the endocarditis as the immediate cause of death. The lining membrane of the heart was of a deep red, and this was not from the imbibition of blood, for it was not present; nor was it from decomposition, for the heart was not decomposed. The membrane was thickened by effused fibrine, and soft and slightly adherent. The membrane itself was readily torn from the heart, showing the decreased vital cohesion, and there were polypiform concretions of uncoloured fibrine adherent to and interlacing the fleshy columns and the cordæ tendineæ. That proves the inflammation to have been recent. In the left lung there was pneumonia in the first stage, but I do not attach much importance to that. The marks of pleurisy on the right side, and of inflammation in the liver, were of old standing."

Mr. H. G. Day, M.R.C.S. and L.A.S., says:—"I live in Church-street, Isleworth. During his life I did not see the deceased man, but on the Thursday after the death. I examined the body in the presence of my partner, at the barracks. I knew nothing of the history of the case previously. I opened the cavity of the chest and abdomen, and found the parts very much decomposed, and, of course, out of their usual position. The heart appeared rather smaller than usual, and of a softened texture. It had been cut open in each direction. I saw nothing decided about the lining of the heart, though it appeared rather inflamed and redder than usual. The lungs appeared gorged, particularly the left side. There were traces of inflammation on the left pleura, but I cannot speak of adhesions, as they had been torn through. The portion covering the ribs was more inflamed than that covering the lungs. The body was in a very decomposed state, and it was difficult to make observations. The liver looked larger than usual, and I thought rather paler. I have heard all the evidence thus far, and I think the cause of death was pleurisy and pneumonia. I suppose the death was caused by change of temperature and exposure to cold."

One might fancy that with all this evidence of four medical men, all in strict coherence and mutual support, and with all this natural sequence of morbid phenomena which are occurring in every-day practice—that there was really very little of the mysterious, or the marvellous, of the extraordinary in this poor man's death. Every circumstance, indeed, seems to have concurred to strip the business of what, in theatrical language, may be described a startling situation or dazzling effect. But the sagacious, popularity-seeking coroner was not to be disappointed. He had opened the public's mouth with wonder and curiosity, and it would be hard indeed if, with his unscrupulous ingenuity, he could not get something wherewith to fill or amuse it. Accordingly his *protege*, Mr. E. Wilson, formerly sub-editor of the *Lancet*, "Wakley's ambulatory *post-mortem* man," as he is generally called, was despatched to exhume the body a fortnight after the death—the three surgeons whose characters were implicated in the examination being carefully excluded by a special order of the prudent coroner (*that* coroner who makes such public scenes to have the accused *present* at inquests to hear the evidence alleged against them). A body in the last stage of decomposition, after a fortnight's interment, during the heat of one of the hottest of summers, is an excellent subject for finding in it whatever may be wanted; and the coroner's scientific hanger-on and partner in *post-mortem* fees is not long in finding out a pathological "discovery which had never been made before"—we quote his own words—"a discovery not to be found in any volume yet published." The microscope, that disenchanting instrument, which, in the hands of the youthful, ardent, unscrupulous, fame-seeking discoverer, has penetrated already the innermost recesses of organic nature, shown us the primordial cell of this nether world, verified by intuitive evidence, the wildest theories of the Greek philosophers, and through which the imaginative anatomist may, with every facility, see whatever he likes, tinting his glasses with phantasmagoric effect,—this wonderful instrument of talismanic qualities, enabled the writer of *Healthy Skin*, "a book, he is happy to say, that is out of print," to detect in the deepest muscles of a putrid corpse injuries they never could have sustained—muscles unapproachable even by convulsive action—and to "discover" that they occupy a position in regard to the membranes of the chest which they have never been known to hold since the creation! We appeal to the common sense of any medical man, if credence can be placed in the testimony of any writer—whether he be a book compiler or not—who tells a public court that the multifidus spinæ lies on the membranes of the chest; that an inflammatory action, arising from a disorganized muscle, can traverse a plate of bone of at least half an inch in thickness, and that a muscle whose actions at all times must be of the feeblest character, (and which in the grown man is of a half-tendinous structure, and therefore not susceptible of the smallest action under any circumstances,) can be suddenly seized with convulsions which spare the enormous and energetic super-imposed masses of muscle from the longissimus dorsi to the integument: masses of muscle, so susceptible of convulsive action themselves that, from a slight injury to the foot or head, they bend the body back into an arch, presenting the frightful appearance of opisthotonos. We are almost ashamed to dilate on the ignorance and bad intention of this enormous blunder, including under it a succession of blunders, any one of which would be damning to the youngest country apothecary. The *Healthy-Skin* gentleman, to suit the wants of his friend the coroner, swears that layers of muscles of enormous power, and quick sensibility from their contiguity to the integument, remain passive, though all but touched with the instrument of punishment, while a muscle almost devoid of muscular action, and seldom, if ever, used in the adult (to show which an anatomist resorts to a subject not more than 15 years of age, so early does it lose its muscular character) is endowed by him, in the teeth of all science and experience, with the opposite qualities to those which it possesses and ignorantly displaced from its natural position to be brought in contact with a membrane which it cannot touch, and all this to give a colour to a charge of legal assassination against a body of gentlemen—one of them a medical brother—for simply performing, and with extreme reluctance, those duties for which they are held responsible by their country. We believe that such a "discovery," and for such a purpose, never before formed the distinction of an English anatomist, and, we hope devoutly, never will.

We give this worthy person's evidence from the *Times*. A more unblushing piece of professional quackery, got up between himself and the coroner, including the address of the practitioner, we never read; and we will only further observe in reference to it, for the sake of our unprofessional readers that Mr. Wilson's "discovery" is not mended by the ingenious device of extending the alleged pulpy degeneration of the muscle to the adjoining part of the external intercostals—muscles to which he has vaguely alluded, prudently, however, withholding their name for reasons known to every anatomist and physiologist.

"Mr. Erasmus Wilson, the next witness called, said—I reside at 55, Charlotte-street, Fitzroy-square, and my profession is that of a surgeon. I am a Fellow of the Royal College of Surgeons, Edinburgh; Consulting Surgeon to the Royal College of Surgeons of London, and Lecturer on Anatomy and Physiology. Some years ago I was Demonstrator in the University College. I have written a work on diseases of the skin, and another work entitled *Healthy Skin*, which I am happy to say is out of print. Mr. Wilson then read the following statement of the observations made by him on examining the body of the deceased, and the conclusions which he drew from those obervations:—

"On Wednesday, July 22, I made a *post mortem* examination of the deceased, my attention being especially directed to his back and spine. On the skin over each shoulder there were marks of lashes, and on the right of the middle line between the shoulders there was a large gap occasioned by the removal of a portion of the skin. A small bottle containing a piece of skin was handed to me by the serjeant of police. I took the skin from the bottle, and found that, though much shrunk by immersion in spirits of wine, while the gap from which it had been removed was stretched to its utmost, yet that it corresponded with the gap, with the exception of the side nearest the middle line, where a part had been cut away and lost. I was informed that the last piece had been cut away in order to make the remainder sufficiently small to enter the bottle. From the position which the last piece occupied, I believe it was more protected from the lashes than the preserved portion, and, therefore, being less interesting, in a medical point of view, had been cut off. On the preserved portion of the skin there had been several marks made by lashes; the marks were red, and upon cutting into one of them, I found that the redness, which was indicative of inflammation, extended through the entire substance of the skin. On raising the muscles, or flesh from off the ribs and spine, I find a part of the deepest line of muscles, viz., that which lies in contact with the bones, in a state of disorganization, and converted into a soft pulp; in medical language, I should call this a pulpy softening of the muscles. The seat of this pulpy softening was the sixth and seventh ribs, near their attachment to the spine, together with their intervening space and, the hollow between the sixth and seventh pieces of the spine. The extent of the disorganization was about three inches in length, by about one inch and a half in greatest breadth, and between a quarter and half an inch in thickness. In the space between the ribs the muscles

had undergone this pulpy alteration, even so deep as the lining membrane of the chest, the softened muscles being in absolute contact with the lining membrane; that portion of the flesh which occupied the groove of the spine, and had undergone a similar disorganization, was one of the little muscles known to medical men under the name of the multifidus spinæ. In addition to softening of this little muscle, it was partly surrounded with blood. It was in a state medically called ecchymosed; the interior of the spine was in a state of extreme decomposition; the tissue between the spinal canal and spinal sheaths was filled with a dark coloured fluid, resulting from decomposition; the sheath itself was smooth and polished on its internal surface—a state indicative of health; it was perfectly devoid of nervous substance, which had been converted into fluid by decomposition, and had flowed away. The nerves remained, and presented a healthy appearance, so that, so far as the spine is concerned, I discovered no indication of disease. Two questions naturally arise out of the preceding examination—first, what was the cause of the pulpy softening of the muscles? secondly, could the state of disorganization, preceding the pulpy softening, influence the disease existing in the chest? The cause of the pulpy softening I believe to have been the excessive contraction of the muscles taking place during the agony of punishment. This excessive contraction would produce laceration, subsequent inflammation of the muscles, and the inflammation instead of being reparative would, in consequence of the depressed state of the powers of the nervous system of the sufferer, be of the disorganizing kind which results in pulpy softening. Had the man lived the disorganization of the muscles would, in time, have been repaired: as regards the second question, there can be no doubt that, although the common cause of inflammation of the contents of the chest is cold, acting in conjunction with physical or moral depression, and might have been the cause in the case of the deceased, yet the presence of a portion of muscle in a state of disorganization and inflammation, in close contact with the lining membrane of the chest, might be adequate to the production of the same effect. Certainly no surgeon would feel comfortable with regard to the state of his patient if he were aware of such dangerous proximity."

> Maxima pars vatum, pater et juvenes patre digni,
> Decipimur specie recti.—HORACE.

IN pursuing the subject we were discussing last week, let us, having finished with the collegiate life of clerical and medical students, look at them in their future professional career. We have already proved that, as a rule, the education of medicine is superior to that of the pulpit; and that the intellectual position of the physician or surgeon is at any time equivalent to, and often much above, that of the clergyman. We know that exceptions are occasionally met with, but these only prove a rule which we state thus broadly.

Now as to the status of each, as respectable citizens and approved moral characters, we utterly deny that the clergy have the smallest advantage over us. We do not mean to visit upon the mass of them the sins of a few, and say, because sundry of them are sinners, they are all of them summarily more or less so. Because, here and there, one of the "good old school" will hiccup a chorus to the tune of "A jolly full bottle," that he is any proof of his brethren being, *toto cœlo*, bacchanalians—because another glories in covering a scarlet coat with a surplice, that they are Nimrods every man—because a third nurses his housemaid on his knee, and proclaims to the less favoured lookers-on that—

> "It's all reality,
> No formality,"

he is any evidence that others of his cloth are more devoted to Venus than virtue. These, again, are exceptions, and the pulpit is not singular in being disgraced with them. It is the rule we are contending for, and we unhesitatingly aver that there is no greater personal respectability, and no purer morality, amongst the members of the clerical, than amongst those of the medical profession. We not only aver thus much, but we unhesitatingly challenge the world to prove the contrary. The clergy in general we know to be forward in any object having the welfare of their fellow-creatures at heart—many of them give largely of what they possess, and cheerfully devote their time, talents, and substance to the cause of humanity. It must be understood, however, that they have nothing else to do; and that these several items of charity are so many features of character which they pledge themselves to, and which most of them are well paid for representing. Nothing of this kind is absolutely required of the medical man—his profession could be scientifically and skilfully practised without such moral ornaments—and yet, how beautifully, how bountifully, they shine in him. He is not committed by oath or by promise, to benevolent or to philanthropic purposes, apart from his calling, and yet he is fulfilling these larger duties every day of his life. Rarely is any public scheme propounded for the "safety, honour, and welfare" of his fellow-creatures, but the medical man is a grand accessory to its origin and progress. Charity hardly records an enterprise unconnected with his name. From pausing, like another Samaritan, to heal the wounds, and help the weariness, of the afflicted, in the humbler and more deserted pathways of human life, where no eye, save that of God, regards, and none other recompense rewards him; up to that more liberal and open beneficence which the world views with ostentation, and requites with empty praise—from the one extreme to the other, the medical practitioner is perpetually employing himself in the service of his fellow-beings. We may be charged with bestowing panegyric upon a society of which ourselves are one; but we are speaking the truth nevertheless, and shall not fear to utter it, though it be imputed to us for vanity.

Now, why, let us ask, should one of our own community be less regarded, respected, and recompensed than his fellow in the church? What has the latter done, or suffered, that the former has not equally, or more largely, shared in? What public or private good does the one do, that is not also done by the other? None! emphatically, none! But we *can* say, that the physician and surgeon often perform services, without fee or reward, which the clergyman will not parallel unless he be paid for it. Look at these two facts. We are intimately acquainted with the condition and management of a large workhouse, containing some three or four hundred beds. Six surgeons attend to the patients in this place, and, additionally, have to attend, at their several homes, the paupers comprised in a town population of more than two hundred thousands. Six men have all this labour, which is sometimes so distressing, that, as one of them said to us the other day, "galley-slavery would be preferable to it." For this fearful toil, both bodily and mental, each man is remunerated with *twenty pounds a year!* To say nothing of his food, the sum will actually do no more than compensate for the wear and tear of clothes in the service. The six men, well educated, well skilled, and worthy of better pay, get among them, *one hundred and twenty pounds a year!* The chaplain to the workhouse, for Sunday duty, and an occasional visit of religious condolence, is paid annually *one hundred and fifty pounds!* For doing about a tithe of what each of the surgeons does singly, he gets, at the end of every twelve months, thirty pounds more than all of them put together! Now, in all common propriety, is this fairness? Is it anything like honesty? We quote this case, not because of its singularity, but because it is one which is personally known to us, and for whose accuracy we can vouch. There is nothing novel in it, we feel assured; plenty of examples, equally notorious, might doubtless be cited. We are not complaining that in these cases, the chaplain gets too much, but that the surgeons get too little. "The labourer is worthy of his hire," no doubt of it, and we are far from grudging the parson his pay—but why, we ask, are not the other labourers, who are equally deserving, recompensed as well? We affirm this paltry partiality to be a gross sin against that common honesty and justice, without which humanity does not even deserve its name.

Take the other case. We know an hospital, the medical officers of which not only attend all the in-patients and out-patients gratuitously, but annually pay over to the funds of the establishment, from three hundred to five hundred pounds, derived from students' fees to clinical lectures. Whilst the medical officers do thus much gratuitously, the chaplain does not even administer a cup of cold water in the name of his Divine Master, *without being paid for it!* Whilst six medical men serve this cause of charity "without fee or reward," not a man can be found amongst those whose sole business it is, or ought to be, to "go about doing good," to preach even the Gospel of God without a *bona fide* sum in hard cash as his compensation.

This case, again, is not singular; we know of many such. We are not acquainted with an hospital, the kingdom through, in which the non-resident medical officers are paid for their services to the sick; nor do we know of one in which the chaplain does his duty for nothing!

Be it understood, once again, that we are not complaining that the clergy make *their* demand, where we hesitate or refuse to make *ours*. Perhaps they are the wiser for doing

so; for they escape two notable vexations—imposition on the one hand, and penury on the other! But, in the contrast, let us ask which character shines the fairer? Which is the greater benefactor of the two? And which, of the public, deserves the better praise? Certainly not the man who gets it. When a new curate comes to a town, whether his pretensions be lofty or lowly, he becomes the fashion, and the favoured of the people: they greet his entrance with a triumph, and his exit with a tribute. Before he has stirred a step in their service, they take his goodness for granted, and give him the welcome of an old friend; when he leaves for "a better berth," they think him a martyr, and pay him accordingly. However excellently, or indifferently, he may have done his duty (for doing which, be it remembered, he has received his fees, aye, and his *feed* too, pretty regularly), there are always plenty of sympathies ready to suggest the getting up a trifle, if it be only as a *memento!* Dear kind man, he has preached to them, and has been paid for it; he has prayed for them, and called in at dinner or dessert time as often as he chose! This is how the parson is appreciated, applauded, and provided for! Is any such benignity bestowed on the medical practitioner? For having done gratuitously what the parson is well paid for, himself never gets more than a frigid vote of thanks. How many services of plate, and purses of gold, have been given to the clergy for having done nothing more than they bargained for; whilst the members of the medical profession have been allowed to leave hospitals and dispensaries, after years of gratuitous service, with a cold compliment for their reward! Again we say, is there not injustice in these things? Ought not the public to be ashamed of its partialities?

Here we anticipate an old crotchet, in answering which we close this part of our subject. It has been said that medical men are recompensed for their services, gratuitously given, by the introduction which is thus afforded them to practice; and that the clergyman ought to be paid in hard cash, because he has not the benefit of such introduction. In answer to the first part of this, all we can say, from pretty extensive experience, is, that for our public duties we would have preferred one hundred and fifty pounds a-year, regularly paid in mint money, to all the extra fees that the pauper attendance could introduce us to; and we apprehend that most institution-practitioners would say the same. As regards the second clause, we find the parson, as usual, stealing a march upon us. He is not only *paid* for his public position, but that very position gives him a publicity: and what is this, if creditable, but another name for *preferment?* Why does a man take a curacy of fifty pounds a year, but that he hopes he may soon get one of a hundred? Why one of a hundred, but that he hopes it will one day double itself? Curate, vicar, rector, prebend, bishop—all are the perquisites of the pulpit and good luck! Not only may a man in the lowest station aspire to the highest in the Church; but, contrary to ourselves, he has not to wait with empty pockets, between one extreme and the other, but is well paid in his several gradations. Thus, then, we see the double inducement of the clergyman—he is not only requited for his present position, but enjoys, additionally, its prospective advantages. Ourselves have neither. We have no recompense secured for protracted public service in hospitals, dispensaries, &c., and no "living well tithed," no honourable denomination, after lengthened servitude.

Why should the clergy have these privileges over us—their equals at any time, their superiors often? Why have we no endowments, as the honourable rewards of servitude administered for nothing? Why should title, emolument, and a seat in the highest legislature in the kingdom, be the recompense of the deserving, or the fortunate in the clerical profession; whilst to the medical, every chance of such preferment is denied? We are not less, intellectually, morally, or beneficently, than they, and wherefore do we fare worse? Have we not, with them, equal hearts to feel for and succour our fellow-creatures, and equal heads to govern them? We put these questions to the legislature, but most of all to the public, and "we pause for a reply." If we have it not, nothing daunted, we will continue to AGITATE until justice be done us!

Miscellaneous Correspondence.

THE PROVINCIAL ASSOCIATION AND THE GENERAL PRACTITIONER.

To the Editor of the Medical Times.

SIR,—I shall be obliged to you if you can find a little space in your columns for the insertion of a running commentary upon the lucubrations of a certain Dr. David Bell, published in the hebdomadal organ of the Provincial Medical and Surgical Association. The worthy gentleman sets out, by expressing a wish that "the Provincial Association" should maintain its position, in order to impress upon the government of the day the urgent necessity of re-arranging the laws by which the profession is governed. Does this elegant stylist know that those "much-to-be-desired changes," which the Provincial Association advocated three years ago, tended to the destruction of the class of the general practitioners, and to the elevation of the dubs and pures, who are the managers, despots and puppet-players of the Provincial Association? The influence of this association was employed to the political degradation of its members; and if Dr. David Bell wish to keep it alive for such a purpose, I trust that the general practitioners will resent the jesuitical and selfish scheme of their rulers, and forthwith withdraw from the Society.

He quaintly informs us that there is a large class of malcontents—by far the most sensible portion of the Association, who ask, "what amount of good has it effected?" and a little further on, he adds, in the guileless simplicity of his heart, that whenever he endeavours to promote the interests of the Association by conversation with general practitioners he is "told by them that they fear *we* gain no ground." The egotistical *we*, printed in italics too, refers to Dr. David Bell being a *member of the Council* of the Association! He admits also that they express dissatisfaction with the condition of the Journal as compared with others (why not have named the *Medical Times* at once?) and he acknowledges with that magnanimous frankness which must be so cordial to the feeling of Drs. Hastings and Streeten that the complainants have "truth on their sides." "Et tu Brute!"—mine own familiar friend!—the apologist of my frailties to expose them also mercilessly,—yourself a contributor, to sneer at the very pages you have assisted to blot! This is indeed too bad. Dr. Streeten might regard with complacency "the rent the envious Casca made," or even forbear to weep over the place where "ran Cassius' dagger through," but the hideous spot where the much-beloved Brutus stabbed, is "past all surgery."

In sober seriousness, Sir, the Journal in question is acknowledged even by its avowed defenders to be a thorough disgrace to medical literature. It ought not to be allowed to exist: and if the members at their next annual meeting, do not come to a vote to terminate its publication, they will not have done their duty either to themselves or to the literary character of the profession. It is a literary mendicant asking alms for its support, when it ought to labour hard for its own maintenance—or die. Die it must, in a very short time: it was born an abortion, vegetated as a dwarf, has been for a considerable period sinking under a marasmus, and not all the galvanism of Dr. David Bell, however skilfully applied will sustain the "*vis vitæ*" of the monster for another year.

The Doctor seems to have had an incontrollable itching in his fingers when he wrote his epistle, for, not content with showing up the delinquencies of the Provincial Association of which, as a member of Council, he might be expected to know something, but he goes out of his way to lecture the National Association upon matters of which he is, evidently, profoundly ignorant. He is however more harmless as an enemy than as a friend; and this is the very worst thing, I desire to say of him. He is very quarrelsome with the general practitioners because they seek to obtain a College for themselves: no wonder "Othello's occupation's gone" immediately the general practitioners achieve their object. The Doctor shews the instinct of his class; nothing more, when he declaims upon the propriety of there being but two grades in the profession, he should inform us, also to which grade he intends to attach the general practitioners, and how he means to invest them with their due rights in that grade. I assume that he would associate the general practitioners with the College of Surgeons. Wiser and better men, with all due submission to the Doctor, have said the same thing and tried it too, and with no better success than to draw upon themselves insult, derision, and contempt. This kind of counsel from quasi friends has become obsolete, because the profession have fully tested its uselessness. If Dr. Bell have nothing novel to suggest, he should in mere decency refrain from dishing up a banquet of "stale events.'

I am, Mr. Editor,

Your most obedient servant,

CRITO.

*** Our Correspondent, whose name we possess, if too hard on our contemporary—a journal as faultless as under *its* circumstances *any* journal could be, does but justice—a very merciful justice—to Dr. Bell: a declaimer as loud-sounding as he is inharmonious to the ears of sense. This sensible physician evidently does not comprehend the elements or uses of the association of which he is a committee-man. What absurdity to expect public union, prudent energy or combined *political* action in an association attracting members as a mere publishing club! An association made up, too, of physicians of all colleges and universities, abroad and at home, of surgeons, pure, or the contrary, and of general practitioners of all degrees of qualification! Well, indeed, may "it gain no ground!' The blunder of the scheme is so monstrous, that the obtuseness must be fatuous which does not see it. But the fact is in the medical profession, the *cacoethes scribendi* is at once universal and ungovernable.

There is a mania for seeing people's selves in print.

Scribimus docti indoctique passim."

Hence, of all professions ours is the most overrun and *infested* with book-making, and journalism; and this in the face of the fact, that medical men are neither great readers nor great buyers. We recollect an elaborate argument supported by statistics, in one of the reports of the Provincial or National Association, to prove that there were not at the outside, more than 7,000* English medical men in the kingdom; yet there are more books and journals annually printed than five hundred thousand of a public would suffice to pay for. We say it strongly and advisedly, therefore, that the heads of the provincial association ought to be ashamed to dabble in petty attempts at needless and inefficacious hebdomadal journalism. Personally, it is a mean ambition for them; publicly it places in jeopardy all the high ends for which the society is formed; and they are responsible. The payment of five or six hundred pounds a year to government for what when a thousand pounds more are spent on it, is worth, and must ever be worth, little more than as much waste paper, is an absurd waste of money, which has been given grudgingly, and is needed in a thousand useful directions excessively. If the respectable heads of this large society cannot get rid of such trumpery views of public conduct, by whomsoever forced on them, and manage the association efficiently for the only two ends for which an association need exist, viz..—for improving the state of the profession socially, and securing its amelioration politically, the honourable and manly thing for them will be to wind up and dissolve forthwith.—ED.

MR. PRESIDENT LAWRENCE.

SIR,—As the representative, and guardian of the interests and respectability of the medical profession, I venture to direct your attention, and that of my brother practitioners, to the recent insult, *so tamely borne*, from the Council of the College of Surgeons in the appointment of Mr. Lawrence as President! "*The geese*," I beg their pardon, members, are doomed to be plucked, and their placid manner of bearing it has been thought remarkable. The last feather perhaps is not yet reached, although, certainly, it has become wondrous white. As I have no wish it should be shown on my part, I cannot do otherwise than express my protest at the unworthiness of the object that now fills the President's chair, of what (per se) is a noble institution. Are our principles and respectability thus to be treated with contumely, *by those* who ought to be, and are professedly, the protectors of our interests? The *conscience* of *one* must already tell him that he has sinned against knowledge, and that whatever defence he makes must contradict his own internal conviction. He has acted in direct contradiction to those laws which he has sworn to administer faithfully, and protect inviolate. I recommend to the consideration of the general practitioner that he do not again meet in consultation one of the present council; by these means he will show them he does not intend quietly to submit to oppression or insult. "The geese" who were providentially ordained to save the capitol, may save the college from its rulers. I would put these questions to the president—"whether the members love him;" "whether they have confidence in him;" or being affected with admiration towards him, "whether they think he deserves honour!" Can he imagine that his late conduct is tolerated by an intellectual profession, or that their silence may be construed into something like apathy or approval of it? if so, let me assure him that he makes a mistake. Had he judged of what course would have been truly honourable to himself, he would have declined *at the present moment* the vacant chair. Common respect for the council, if he had none for the profession whom he was about to represent, should have taught him better things. Is it not *revolting* that presidencies should be thus obtained, and that vacant seats should be occupied, under the most painful circumstances; that there should exist men, *and big men, too*, who are ready, cash in hand, to purchase from those who are not proof against the extremity of distress though reproached by feelings, too naturally connected with despair? MEDICUS.

MR. WAKLEY AND HIS FIDUS ACHATES.

SIR.—In reading the evidence of Mr. Erasmus Wilson, before the coroner at Hounslow, on the flogging case, I was painfully struck with the incorrectness, to say nothing of the animus, of the witness, displayed in that evidence.

Mr. Wilson is not a fair witness in this case, for the following reasons- Mr. Wilson and Mr. Wakley have been intimately connected for several years. Mr. Wilson was tutor to Mr. Wakley's son, Thomas, Junior. Mr. Wakley orders Mr. Wilson (his intimate friend,) to examine the spine of the dead soldier, whose body had been twice examined before, informing him at the same time, that he (Mr. Wakley) had a notion there was something wrong with the spine, which the other surgeons did not find out.

Mr. Wilson obeys orders, and incontinently discovers a mare's nest, as much to please the Coroner as for the purpose of putting himself at the inquest. The mare's nest is called by Mr. Wilson "a pulpy softening of the muscles," which morbid condition he claims the honor of being the first to discover.

This pulpy state of muscle is nothing else than decomposition of the parts, infiltrated by blood from gravitation, in a body which was dead for more than a fortnight before Mr. Wilson opened it, and in the hottest weather known for forty years. In the course of his evidence Mr. Wilson congratulates himself and the jury on—what do you think?—that he discovered the real cause of death?- No such thing; but that his *books are out of print!* and then proceeds to edify the jury with his medical pedigree, with the sanction of the Coroner. What had all this to do with the case in point?

If Mr. Wakley wanted to puff his friend, he should confine himself to the pages of the Lancet, where, by the by, he abuses all puffery and quackery unconnected with himself, and not stultify the profession, and impede justice by such silly puffing twaddle as passed between himself and his surgeon on Monday last.

The whole case is evidently a got up one—Mr Wakley wants to puff himself with the public as a *friend of the poor*; and his friend Mr. Wilson wants to puff himself into practice. I am by no means a supporter of the flogging system, for I think it is brutal and barbarous; but, in the spirit of fair play and truth, let not an innocent and worthy officer be sacrificed in the attempt to put it down by a popularity-hunting Coroner and a foolish surgeon. It is abundantly clear from the medical evidence that the cause of death in the case of the soldier White was not the lash, and even Mr Wilson's evidence (although shaped to order) goes to prove this fact.

That the effects of the lash penetrated through the mass of muscle (very considerable in the thinnest subjects) which flanks the spine, produced old adhesions, inflamed the pleura, the heart, its valves, carneæ columnæ, and leading arteries, besides engorging the left lung with serum, is an assumption so truly ridiculous in a medical point of view, that were it not for the approaching general election, and the dearth of *popular* subjects for electioneering purposes, I should be inclined to think the Hon. Member for Finsbury demented, and his garrulity at the Hounslow inquest, a melancholy exhibition of an effete intellect.

July 28th. FAIR PLAY.

TEMPERANCE AND SKIN DISEASE.

[To the Editor of the Medical Times.]

RESPECTED FRIEND,—The following passage from the Lecture of James Startin Esq., Surgeon to the London Cutaneous Institution, has at least awakened my curiosity. Speaking of Acne Rosacea, he says, "But in justice to those afflicted with this often misjudged disfigurement, I must beg you will observe, that the intemperate are not its only victims, for the water drinker is by no means exempt; indeed I have fancied cases of acne rosacea have multiplied since the introduction of teetotalism, and this to an extent that has occasioned my regarding that species of abstinence as one of the predisposing causes of that disease, arising, probably, from the disorder it induces in the digestive organs, deprived, perchance suddenly, of an accustomed stimulus."

I am glad to find that the attention of James Startin has been turned to the relation between alcoholic liquors and cutaneous diseases, which is perhaps more intimate and extensive than has been generally supposed; but it is rather a bold move of the Lecturer to attempt to shift the disease in question from the class which has hitherto suffered the affliction, and fasten it on Teetotallers.

Perhaps I should scarcely have noticed this paragraph had it not appeared to me a serious thing to promulgate in a lecture to a class, the mere fancy, for he calls it by no higher name, that acne rosacea has increased to such an extent since the introduction of teetotalism as to have occasioned his regarding that species of abstinence as one of the predisposing causes of that disease. He attempts to account for it, from "the disorder it induces in the digestive organs deprived, perchance suddenly, of an accustomed stimulus." I must confess myself sceptical as to any disorder of the digestive organs being a necessary consequence of simply abstaining at once from intoxicating liquors, but that it should occur to such a degree as to induce acne rosacea, and to such an extent as to materially affect the prevalence of that disease, is at least highly improbable, unless indeed the complaint has assumed entirely new characters. Whenever disordered digestive functions supervene on total abstinence from alcoholic liquors, it is probable that careful observation would detect other causes, as errors in diet, having no necessary connection with abstinence; sometimes the drinking of flavoured, coloured, syrups sold under the name of temperance drinks; or immoderate quantities of coffee, tea, soda water, lemonade, &c., taken under the idea of a substitute for the liquor which has been given up. Yet even these dietetic errors are scarcely sufficient sensibly to increase the number of cases of acne rosacea, if indeed they had the power to induce a single instance.

I have paid attention to the health of Teetotallers from the commencement of the temperance movement. I have known moderate drinkers and hard drinkers; malt liquor drinkers, and wine and spirit drinkers, abandon their use at once, and I am not aware of a single instance in which the digestive powers were impaired or the general health injured from that cause alone. It is indeed highly improbable that any disorder should arise from withdrawing an unnatural stimulus like alcohol, on the contrary, the stomach generally seems delighted to get rid of so troublesome a guest, and performs its duty with alacrity and vigour.

When I speak of no injurious consequences resulting from the change from drinking to abstinence, I mean entire abstinence, at once, from all distilled and fermented liquors, without any exception or reservation whatever, the almost immediate effect of which is increased buoyancy of feeling. improved appetite, especially for breakfast, far more enjoyment of the flavour of plain food, less inclination for seasonings and condiments, less thirst, and yet a higher relish for pure good water. The results, however, will not be the same if the alcohol is attempted to be withdrawn gradually, either by diminishing the quantity taken at once, or increasing the intervals. A very little taken either occasionally or at stated intervals is sufficient to keep alive the alcoholic appetite, to tantalise and fret the stomach, and mar the whole experiment. Dr. Bateman says, "the perfect cure of acne rosacea

is, in fact, seldom accomplished, for whether it originate in a strong hereditary predisposition, or from *habitual intemperance* the difficulties in the way of correcting the habit of body, are almost insurmountable." Yes, the difficulty is great and altogether insurmountable on any other principle than that of entire abstinence at once, which would be found far more easy and practicable, as well as more efficacious in correcting the habit of body than any measures whatever short of this.

Good, Bateman, Plumbe and other authors all attribute acne rosacea to the intemperate use of intoxicating liquors. Plumbe has only known one case of this disease that was not connected with the habit of *hard* drinking. Dr. Todd in the Cyclopædia of Medicine says, "It is not however to be forgotten that acne rosacea *sometimes* appears in people of the most sober and temperate habits;" this, sometimes, shews that its occurrence in sober and temperate habits was looked upon as an exception to its general appearance. He also says ' it sometimes shews itself in conjunction with a state of exhaustion and general debility." If this exhaustion and debility could be shewn to prevail more amongst teetotallers than amongst habitual drinkers of any grade, it might favour the idea of some necessary relation between abstinence from intoxicating drinks and the prevalence of acne rosacea. Till this is done I apprehend some other cause than teetotalism must be sought to explain the multiplication of cases of that disease.

I am, very respectfully,

JOHN FOTHERGILL, M.R.C.S.

Darlington, 2nd. Mo., 28th, 1846

A QUERY.

SIR,—I am anxious to qualify myself for the specialty of witness to coroner's inquests; being on the point therefore of publishing a work on ——, a subject on which I am profoundly ignorant, and another on ——, which is now being written for me, at so much per sheet, I should be much obliged if you could help me to the name of some literary carpenter, who can knock up a discovery or two to order, on moderate terms.

F. R. S.

P.S. Are you acquainted with Mr. Erasmus Wilson? What are *his* terms?

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted Members, on Friday, July 24th, 1846, viz.: Messrs. T. H. Marshall, O. E. P. Chard, H. S. Saunders, W. L. Grundy, H. Sillifant, J. Rowe, and J. Bolton.

Admitted, Monday, 27th: Messrs. J. Olguin, T. Hooker, T. P. Davis, E. M. Teame, A. Y. Kayat, D. N. D. Basu, G. C. Seal, B. N. Rose, W. R. Black, M. Johnson, R. Nichol, R. D. Ball, W. Cross, W. S. Hill, and J. Spurr.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted members of this college on Friday, the 17th inst., viz., Messrs. C. O. West, R. J. Squire, W. L. Norris, G. D. Haslewood, W. H. Colborne, G. C. Leather, J. M. A. T. Croft, J. E. Wood, E. Fletcher, C. Nattrass, C. Peskett, and J. Nuttall.—Admitted Monday 20th. H. Leskett, W. S. Stiven, G. Hawksford, J. Yates, J. Kempthorne, G. H. P. Sparrow, C. R. Matthew, W. Knowles, H. Hides, J. Hooper, and J. J. Roughton.

WESTERN GENERAL DISPENSARY.—Dr. J. Hennen, has been appointed physician to this Institution.

APOTHECARIES' HALL.—The following gentlemen were admitted licentiates on the 16th July, 1846:—Charles Rooke Prance, Benjamin Miller, Walter Youge, Robert Smart, John Foster, Edward Cripps, Robert Niblett, Joseph Samuel Davies.

ELECTION OF COUNCILLORS.—A large meeting of Fellows took place on Tuesday last, in the Theatre of this College, for the purpose of filling up the vacancies occasioned by the resignations of Messrs. Anthony White and George Gisborne Babington. The chair was taken at three o'clock, by Mr. Lawrence, the President, supported by Messrs. Travers and Stanley; the election was as usual by ballot, the President declared Mr. Richard Wellbank re-elected, and Mr. Richard Dugard Grainger, the Lecturer on Anatomy at Saint Thomas's Hospital, and Mr. James Luke, Surgeon of the London Hospital, Members of the Council.

APOTHECARIES' HALL, 23rd July, 1846,—Septimus Lowe.

OBITUARY.—On Friday, the 10th instant, at his residence, in Stafford-street, Liverpool, aged 39, Mr. James A. Day, surgeon.

OBITUARY.—Dr. Souberbielle has just died in his 92nd year. He was the pupil of the celebrated Frere Come. M. Le Conseiller Domingos Ribeiro dos Guimaraes Peixoto, Baron of Iguarassu, first physician to H.M.H., the Emperor of Brazil, died on the 22th of April last. M. Beuzenbey, formerly professor of chemistry at Dusseldorf, died recently aged 72.

OBITUARY.—On the 4th inst., in the gaol of Appleby, Mr. James Towers, M.D. Deceased had been upwards of twenty-four years a prisoner in Appleby gaol. He was tried at the spring assizes, 1822, for the murder of his wife, and sentenced, on the ground of insanity, to be kept in strict custody during his Majesty's pleasure. On the 17th inst, at St. Lawrence, Thanes, Sir Thomas Grey Knight, M.D., F.R.S., and for more than twenty-five years magistrate of the county of Kent and the Cinque Ports.

On Sunday, the 26th inst., in the 34th year of his age, deeply lamented, Arthur Tibson, Esq., surgeon, of Spring-street, Sussex-gardens.

WAR-OFFICE, July 24th. 3d Foot.—Assist.-sur. George Fenton Cameron, M.D., from the 63d Foot, to be assistant-surgeon, vice Gordon, promoted on the Staff. 63d Foot: Josias King Carr, M.D., to be assistant-surgeon, vice Cameron, appointed to the 3d Foot. Royal Lanarkshire Militia: John Thomson, M.D., to be surgeon, vice Anderson, deceased. Forfar and Kincardine Regiment of Militia: assistant-surgeon Alexander Dickson, M.D., to be Ensign, vice Richardson, resigned.

NAVAL APPOINTMENTS.—Assistant-surgeons: Alfred Jackson (additional acting), of the Victory, to the Raleigh; J. C. Murray, M.D., to the Victory.

A commissary of the French police has lately seized a large quantity of tainted meat belonging to some butchers in Paris. This meat would have been sold to the keepers of small eating houses to form the food of the lower classes. About 2,000 weight of it has been sent to feed the beasts in the royal menageries.

EXAMINATIONS BEFORE THE FRENCH FACULTY OF MEDICINE.—In 1844, the faculty of medicine of Paris, on the proposition of the dean, passed a resolution requesting the minister of instruction to obtain from the chambers an annual salary of 1,000 francs each, for the *Agrégés* (assistant professors) of the faculty of medicine. In thus endeavouring to improve the position of the *Agrégés*, M. Orfila, the dean, proposed, at the same time to confer on them new offices in examinations and teaching, and thus to elevate a post already highly distinguished. After frequent requests to both the present Minister of Instruction, and his predecessor, M. Salvandy has demanded of the Chambers the sum of 50,000 francs, which has been granted. Thus, after the 1st of January next, the *Agrégés* will receive each a fixed annual salary of 1,000 francs, independently of their present share in examination fees, which was voted to them in 1823, and of their remuneration when called on to perform the duties of professor. In Paris this remuneration amounts to 2,000 francs, when an *Agrégé* is required to deliver the whole of the course of a professor who is absent or ill.

APPOINTMENTS.—Surgeon; C. Coffey, to the Recruit. Assistant-Surgeons: C. Grier, to the Cherokee; J. Forbes, to the Mohawk.

WAR OFFICE, July 11—11th Regiment of Foot: Assist. Surg. Richard Dane, M.D., from the 29th Foot, to be Surgeon, vice West, deceased.—29th Foot:—Alexander Mackay Mackay Macbeth, gent. to be Assist. Surg., vice Dane, promoted to the 11th Foot.—Hospital Staff: To be Assistant-Surgeon to the Forces, William Westall, M.D., Thomas Parr, gent., George Frederick Fletcher, gent.

KENT MEDICAL BENEVOLENT SOCIETY.—The fifty-ninth anniversary meeting of this Society was held at Canterbury, on Wednesday, the 8th of July; F. H. Sankey, Esq., President Allowances for the ensuing year were granted to nine applicants, amounting together to the sum of 215l. The gratifying announcement that the permanent stock of the society amounted to six thousand pounds, three per cent. consols, led to the consideration of the propriety of extending its benefits, and a resolution to the following effect was unanimously adopted:—"That a general meeting may grant relief under circumstances of peculiar distress, to any member or his family, at any period after his joining the society, provided he has done so previous to his attaining the age of thirty five years, and that two-thirds of the members present approve of such grant." An annual subscription of one guinea for ten years, or the payment of the sum of ten guineas, will still be requisite to entitle to the benefits of the society, by any person who may join the society after he has attained the age of thirty-five years. Assistance to the amount of nearly eight thousand pounds has been afforded by this society to thirty-four members or their families since its institution.

The quarantine question will be seriously discussed at the Scientific Congress at Genoa. It has been admitted, after some consideration, among the class of most important subjects.

The Emperor of Austria has just named a commission to arrange the building of a new asylum for the the insane of Vienna. The sum of 600,000 florins has been allotted to meet the first expenses

The prizes were distributed to the pupil-midwives of the Parisian School of Midwifery on the 23rd of June. M. the Viscount de Montmar presided at the ceremony.

A Hungarian has discovered a means of preserving cattle from the contagious typhus which has given rise to such lively disquietude to the breeders of a great part of Europe, especially France and Germany. The means is simple and easy. It consists in inoculating the animal to be preserved with the saliva of one of those labouring under the disease. This inoculation is said to be as efficacious as that of vaccine in preventing small-pox in the human subject.

MORTALITY TABLE.

For the Week ending Saturday, July 25, 1846.

Causes of Death.	Total.	Average of 5 summers.	Average of 5 years.
ALL CAUSES	1003	898	968
SPECIFIED CAUSES	991	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	308	201	188
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	115	99	104
Diseases of the Brain, Spinal Marrow, Nerves and Senses	158	155	157
Diseases of the Lungs, and of the other Organs of Respiration	199	227	294
Diseases of the Heart & Blood-vessels..........	27	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	87	87	72
Diseases of the Kidneys, &c. ..	16	6	7
Childbirth, Diseases of the Uterus, &c.	7	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	8	6	7
Diseases of the Skin, Cellular Tissue, &c..........	3	1	2
Old Age..........	38	52	67
Violence, Privation, Cold and Intemperance..........	25	26	26

No. 358. SUMMARY. [A]UGUST 8.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of July 27, 1846; M. MATHIEU in the Chair.

DIGESTION OF ALCOHOLIC FLUIDS.—By Messrs. Sandras and Bouchardat. In their previous physiological researches, the authors inquired into the digestion of fat, saccharine and feculent principles, and their share in nutrition; fermented liquids still remained to be studied, and the following are the results of the investigation they have instituted for the purpose of completing the history of what they call "the food of the organs of respiration." During the first part of the process of digestion fermented fluids are not dissolved, but are merely diluted by the saliva, gastric juice, and the other liquids which occupy the cavity of the digestive viscera. As M. Magendie had already shewn, the absorption of the alcoholic fluids is performed by the venous orifices in the stomach, and the lacteal vessels have no share in this action—a circumstance proved by the facts, that after the ingestion of alcohol, not a particle of that substance can be detected in the chyle. The organs of secretion do not eliminate fermented fluids, a small portion of which only, is evaporated from the pulmonary surface. When excessive quantities of spirituous liquids have been admitted into the circulation their first effect is to prevent the arterial blood from acquiring its florid colour, and to expose the patient to asphyxia. The oxygen largely introduced into the sysmte during the act of respiration may often convert the alcohol into water and carbonic acid; but in several cases an intermediate product, acetic acid, has been obtained. Fermented fluids, very soon pass entirely out of the body; and their elimination is more speedy when they have previously been in combination with dextrine or glucosis.

FISTULOUS GASTROTOMY.—M. Sedillot presented the first part of a memoir on fistulous gastrotomy. The author gives this name to an operation, which consists in establishing a permanent opening in the parietes of the stomach, in order to furnish an artificial passage for food, in those cases, in which, the œsophagus being completely closed by a permanent stricture, the patients necessarily die of inanition. In this first part of his work, M. Sedillot gives a summary of the considerations on which he founds the indications and the probability of success of the operation he proposes. These considerations are based on cases of cure of wounds in the stomach, and on the existence of permanent gastric fistulæ being compatible with life; on the possibility of producing directly a permanent fistula of the stomach, and on experiments made on animals. Among the different questions which presented themselves for examination, the author considers the following: 1st, Will food introduced directly into the stomach, through a fistulous opening, be retained by the organ? 2ndly, Will it be digested? 3rdly, What alterations in the composition of the chyle, and, consequently, in nutrition, will be caused by the absence of mastication, of insalivation, and of the action of the pharingo-œsophageal mucus, and by the presence of the fistula? 4thly, By what means can these accidents be partly or entirely relieved, if found to exist? He then gives the following considerations on each of these questions:—1st, Cases in which gastric fistula has occurred show that the patients are able easily to close the orifice, by the use of tents, bandages, or metallic bodies of a proper size and shape. Most of these patients enjoyed good health, and the food and drink never escaped involuntarily from the wound. If this be the case in accidental fistulæ, at first of considerable size in many cases, the closure, by a fit instrument, will be very easy in fistulæ made by operation. 2ndly, A fistula being formed, and capable of being opened or shut at pleasure, it is clear that the food, reduced into a pap or semi liquid state, will be carried into the stomach from above downwards, and that it will thus fill the organ. But will this viscus reduce it into chyme? No doubt can exist on this point, because we daily introduce food into the stomach through an œsophagus bougie. What difference can the defective insalivation and mastication of the nutriment produce? Mastication is a mechanical trituration, easily performed artificially; insalivation, therefore, only remains to cause defective nutrition. The author, in conclusion, seeks to prove, by considerations founded on pathology and human physiology, that fistulous gastrotomy is an operation well founded, both in theory and fact.

M. Serres wished to inform the meeting, on the occasion of this paper, that having been much occupied in considering the horrible condition of patients affected by an organic disease of the œsophagus, which prevents the introduction of food, he had conceived the idea of an operation similar to that described by M. Sedillot; but that as he had not had an opportunity of putting it in practice, he had avoided mentioning his discovery to the Academy. M. Serres congratulated M. Sedillot, on suggesting the same idea. The object of the present paper being something of the same nature as that in which M. Maisonneuve some time since proposed a new method of invagination for the relief of intestinal strangulation, M. Serres proposed that it should be sent to the same commission.

M. Flourens observed, that the author being already a corresponding member of the Academy, there was no occasion to refer his memoir to a commission. An abstract of it would be inserted in the *Comptes Rendus*, when the commission would notice it.

[This proposition was agreed to by the Members present.]

HOPITAL DE LA CHARITE.

CLINICAL LECTURE BY PROFESSOR VELPEAU.

Polypus of the Nose and of the Ear.—You have lately seen in the wards, a case which was operated upon and in which surgical interference was rendered very difficult from the presence, at the same time, of fibrous polypi in both nasal cavities and in the pharynx. The impossibility of excision and ligature obliged us to have recourse to another method, that of crushing, which performed in the nose; after a few days the polypus of the pharynx was spontaneously detach[ed]. [To] this case we now call your attention; it is important, because it might serve to establish a new treatment for polypus. In the throat, extirpation is a difficult and dangerous operation, which may be followed by hæmorrhage, a severe accident in that region. The method we employed in the case just referred to—crushing—might be likewise applied to uterine polypus. When the latter is crushed it is also cured, gangrene bringing on its separation from the womb. This is also the case when the tumours occupy the nose: in a word crushing is a safer plan for the patient and a more convenient method for the surgeon. This of course refers only to fibrous polypus.

We also have in the wards a case of vegetations of the left ear. In this region polypi are not very common; they deserve besides, to attract some degree of attention because they are usually symptomatic of another disease, and are more frequently connected with an affection of the cavity of the tympanum than of the membrana tympani. They may be cellular, fibrous or cancerous. The first form, the cellular polypus, depends often upon caries of the petrous bone, and its prognosis is of course therefore, [ext]remely serious. In this respect a great difference must be made between the polypus of the nose and that of the ear. We do not find it produced by caries in the nasal cavities, whereas this alteration often occasions vegetations from the meatus auditorius, and is followed with abscess which sooner or later terminates in cerebral disorder. The woman who presents polypus of the ear, has always complained of hardness of hearing; sharp pains have been felt in the organ, and a discharge has for some time existed. At present, a greyish production may be distinctly seen in the ear, and its surface is free from any trace of suppuration or hæmorrhage, a fact which may lead us to admit, with some reserve, that the origin of the disease lies in the membrane, and not in caries of the bone. Long dissertations have been written on the subject of aural polypi; the ear is a region which has given rise to a family of special pathologists, who have found it advantageous to their own purposes to write long books on trifles and to say many useless things. In the ear almost all tumours, whatever their nature, assume the shape of polypi; this circumstance is clearly due to the form of the duct which, communicating with the pharynx by the eustachian tube, present besides a mucus mem-

brane, nerves and vessels, and also with the mastoidau cells and labyrinth, is occupied by tumours as different in nature as they are in origin. When caries is suspected, it is at first useless and imprudent to examine the parts with a probe; when the instrument can penetrate into the cavity of the tympanum, it may lacerate one of the three delicate little muscles which are attached to its bones and, coming into contact with these, may furnish, on account of the extreme thinness of their periosteum, an erroneous sensation which could readily be mistaken for that given by caries and if that sign were consulted, a false diagnosis might be the consequence.

Poisonous effect of Belladonna.
(From the Repertoire de Pharmacie.)

Case.—M. X. was seized on June 23, 1845, with a slight rigor; which had for two or three days been preceded by headache, sore throat, and pain in the right elbow. The patient aged 21, was of a vigorous, healthy temperament, and had lately had a slight blennorrhagic discharge, which had yielded to the balsam of copaiba. On June 24, two physicians met in consultation, and they agreed to exhibit extract of belladonna in *grain* doses every hour. During the following day the patient took 18 grains of the extract, and a mild form of delirium having supervened, the medicine was suspended. Three other pills were however, given at more distant intervals, during the ensuing day, when two attacks of violent mania occurred, the patient becoming dangerous to approach, and being at the same time affected with the most singular hallucinations. The attacks were preceded by a condition, which the medical attendants compare to angina pectoris, and caused the greatest apprehension. The rheumatic affection of the elbow joint had not been in the slightest degree improved by the treatment. During one of the attacks, life even seemed to have departed, a deep fainting fit having occurred. This state of unconscious and violent insanity lasted for 24 hours, after the last dose of medicine, when the patient took some strong coffee, and gradually recovered, the rheumatism not being however modified.

In this case, the dose of the drug seems to have been unwarrantably large. Several instances of acute rheumatism are on record, which have been rapidly cured under the influence of the extracts of the Solaneæ tribe: but in the case above related, it is not even certain that the physicians had to do with acute rheumatism. The circumstance of the disease attacking only *one* joint—and that, a few days after the cessation of a gonorrhœal discharge, points in a very marked manner to blenorrhagic arthritis; on the other hand the extracts were never recommended by Dr. Lebreton, the promoter of the method, to be used in such immense doses: that practitioner exhibits only one-fourth or one-fifth of a grain of the extract of stramonium, or of hyoscíamus, or of belladonna every hour—the medicine should be continued until incipient delirium appears, and then its exhibition slackened. In this manner no danger attends the treatment; and if success be not certain, still the physician cannot be accused of having placed in jeopardy the life or reason of his patient.

Dan. M'Carthy, D.M.P.

Germany.

Obliteration of the Œsophagus, with Communication of the Lower Part of the Canal with the Trachea.—Professor Levy, of Copenhagen, relates two cases of this malformation, in the *Neue Zeitschrift fur Geburtskunde.* The first case was that of an infant, apparently healthy when born, but which was unable to suck, and rejected everything that was administered to it. The day after birth a catheter was introduced into the œsophagus, but was arrested at a depth of about four inches. Milk injected through the catheter was immediately returned by the nose and mouth, producing symptoms of suffocation. Closure of the œsophagus was accordingly diagnosticated, and some broth was injected into the rectum. At the period of its birth, the infant weighed six pounds and a half; forty-six hours afterwards it only weighed five pounds and a half; fifty-eight hours after, it weighed five pounds and a quarter; seventy hours after birth, it weighed five pounds and an eighth; eighty-two hours after, five pounds. The infant died eighty-three hours after birth. The child lost, therefore, during four days, one pound and a half in weight, half-a-pound being the loss during the last two days. The urine and fæces presented a natural appearance; they were passed at long intervals, and scarcely exceeded the weight of the broth injected. On post-mortem examination, the upper portion of the œsophagus was found to terminate in a cul-de-sac, in which the catheter introduced by the mouth, was arrested. This sac was about an inch long, and twice the size of an ordinary œsophagus. The structure of the muscular fibres presented nothing abnormal, except that they converged towards the truncated extremity of the tube. The inferior portion of the œsophagus was connected with the trachea and larynx; so that a catheter introduced through an incision in the cardiac extremity of the stomach, passed easily through the trachea and larynx into the mouth. The communication between the trachea and the œsophagus took place about a line below the bifurcation of the trachea, and was formed by an oval opening, three lines long and one line wide. The posterior wall of the air-duct and the respiratory mucous membrane were continuous with those of the digestive canal. In the second case, the fœtus was born before the full period of gestation, and died immediately after birth. In this case, Professor Levy found besides several malformations in the region of the pelvis; that the upper part of the œsophagus terminated in a cul-de-sac, and that the lower communicated with the right bronchus. The communication of the tube with the trachea differed from that in the former case, inasmuch as the œsophagus contained some cartilaginous rings in a part of its extent. With the exception of the case of Martin, republished in the pathological anatomy of M. Andral, Professor Levy has never seen any other examples of this malformation than those just related. These cases support the opinion of those who regard monstrosities as arrests of development.

Report of the Cases in the Lying-in Hospital of Gottingen during the Years 1841, 1842, 1843, and 1844.—Dr. Siebold, in the *Neue Zeitschrift fur Geburtskunde*, gives a statistical account of the practice of the Gottingen Lying-in Hospital. During four years, 461 accouchements took place, of which six were twin cases, making the number of births 467. 240 of these were boys, and 227 girls. 229 deliveries took place between the hours of six in the morning and six in the evening, most of them occurring during the early part of the day; and 232 between the hours of six in the evening and six in the morning, the greater number being after midnight. The longest duration of any labour was eighty-four hours; the shortest, three-quarters of an hour. Of the 467 births there occurred:

Natural labours	422
Turning cases	4
Footling cases	3
Forceps cases	36
Perforation of the cranium	1
Cæsarian operation	1
	467

All the women delivered by the forceps recovered, and two infants only were born dead. It is remarkable that, generally speaking, in these cases, the accoucheur placed himself by the side of the woman, without disturbing her from her natural position in the bed, either to apply the instrument, or to assist in the extraction of the child. The four children delivered by turning died. Of the three foot presentations, one infant survived, the second died, and the third was in a state of decomposition previous to labour. Artificial labour was brought on prematurely in one woman, who had been previously twice delivered by means of craniotomy. The infant lived a few hours only. Craniotomy was performed on one infant in consequence of contraction of the pelvis, the child being evidently dead before the operation. The cæsarian operation was indicated in one case in consequence of osteomalacia, although the child was evidently dead. The mother died on the fifth day after the operation. Artificial extraction of the placenta was necessary in eleven cases, on account of hemorrhage, and was performed in all cases with success. It was necessary to detach it four times, once on account of adhesions produced by calcareous concretions. Twenty-two children were born dead, and twenty-one died soon after birth. Ten women died; six of peritonitis, two of nervous (?) fever, one of delirium-tremens, and one from the effects of the cæsarian operation. Out of 467 deliveries, the head presented in 453; the right parietal protuberance being the presenting part in 311, and the left in 123. In 434 cases, the lesser fontanelle was in advance; and if, at the commencement of labour, it had been placed posteriorly, it was found in advance at the moment of the expulsion of the head. In eight other cases only the fontanelle remained posteriorly, and the rotation of the head did not occur. M. de Siebold always found the sagittal suture placed in the oblique diameter of the pelvis and the fontanelles directed towards the sides, even at the moment of passing the vulva. Presentation of the face was only observed once, in which case the labour terminated naturally. Of 1400 labours, which M. De Siebold has attended in the Lying-in Hospital since 1833, face presentation has only occurred three times. In six breech presentations, the delivery terminated without assistance, and the mother and child both did well. In one case of breech presentation, it was necessary to make some traction to deliver the head, and the child died. In a second case, assistance was required in the delivery of the shoulders: the child survived. Out of five footling presentations, manual assistance was necessary three times, in order to extract the child. In one of these cases, the child was born alive; in the second, it died during labour; and in the third, it was born in a state of putrefaction. In the two footling cases left to nature, one child did well, and the other was born in a state of putrefaction.

Ovarian Dropsy.—Dr. Schreiber reports four cases of ovarian dropsy, in the same journal. He gives the following resumé of the cases: The patients were aged respectively forty-one, sixty-seven, thirty-six, and thirty-nine years. Menstruation continued regular in the woman, aged thirty-six; it ceased soon after the commencement of the disease, in the woman of forty-one, and its suppression seemed to hasten the progress of the dropsy. The woman aged forty-one had been delivered of eight children; the one aged sixty-seven, of five; the woman aged thirty-six, of two; and the woman aged fifty-eight, of two. The seat of the disease was twice on the right, once on the left, and once on both sides. On the points of its development and duration, Dr. Schreiber says that the patient aged thirty-six suffered, at the age of twelve, from an abscess in the right ovarian region; notwithstanding this, she married, contrary to the advice of her physician, and at the age of thirty, several years after marriage, became a mother. After a laborious accouchement, a swelling appeared in the right side, but, after the escape of a large quantity of pus and serum by the rectum and vagina, she recovered, again became pregnant, was twice delivered easily, and aborted in a fourth pregnancy. In the patient aged fifty-seven, the disease commenced with hysterical symptoms at the age of forty-two. The patient aged forty-one suffered during pregnancy from severe colic, fifteen years before the positive diagnosis of the dropsy of which she died. The patient aged fifty-eight had suffered from cramps in her stomach, pains in the belly, and had one bad abdominal inflammation; she died at the expiration of eighteen months. In addition to the usual symptoms of dropsy, there were difficulty in passing urine and stubborn constipation, in three cases; and in one case there was vomiting of fecal matter. The patients were able to follow their usual occupations during the greater part of

the disease, and were only obliged to keep their beds a short time before death. Puncture, performed early, gave relief; but towards the close of the disease, it seemed to hasten death. The operation was repeated every six or eight weeks, and the quantity of fluid removed was usually about fifteen pints.

CÆSARIAN OPERATION.—Dr. Kunsemuller records three cases of cæsarian operation, in the same journal. In the first case, the patient was forty-one years of age, and had been previously delivered of six children; at the close of the seventh pregnancy, the cæsarian section became necessary. The child was extracted dead, and the mother died on the next day. In the second case, the patient was forty-three years of age, and had had ten children before. The pelvis became deformed by osteomalacia, so that the cæsarian section became necessary at the expiration of the eleventh pregnancy. The child was dead, and the mother died on the sixth day. In the third case, the patient was thirty-eight years of age, and had been safely delivered of five children. She had been much exposed to want and misery, in addition to disease. Her pelvis became deformed, and at the sixth labour, the antero-posterior diameter was found diminished; however, the child was extracted, with some difficulty, by means of the forceps. At the end of the seventh pregnancy, osteomalacia had made so much progress, that the cæsarian operation was necessary. Both mother and child were saved.

ATTEMPT TO FORM A SCALE OF THE VALUE OF DIFFERENT SUBSTANCES IN THE ANIMAL AND VEGETABLE KINGDOMS, BASED ON THE PROPORTION OF AZOTE CONTAINED IN THEM.—Drs. Schlossberger and Kempt have published, in the *Archiv fur Physiologische Heilkunde*, a valuable paper with the above title, of which the following is a full abstract. The distinction of alimentary substances into plastic or azotised, and those serving for respiration, or non-azotised, is one of the great steps of modern physiology; all former attempts which had been made to classify nutritious substances, according to their more or less assimilable qualities, having failed, and not proving serviceable in forming dietetic rules.

Prout suggested that the more carbon any substance contained, the fitter it was to sustain life; but experience has since shown, that although all food should contain carbon, the presence of azote is indispensable, because the organism of animals cannot convert unazotised matters into azotised, although in constant contact with the azote of the atmospheric air, and of ammoniacal vapours. Still, however, Prout's scale was of service, inasmuch as it taught us the abundance of alimentary matters suited to purposes of respiration, which matters sustain so much the more easily pulmonary hematosis and animal heat, as they contain more hydrogen and carbon; such, for instance, as oils, fats, fecula, saccharine, and spirituous substances.

But the nutrient matters, properly so called, that is to say, those which serve to renew the blood and the tissues, are not the richest in carbon; those only which assist in the formation of cellular and fatty tissues, need contain much carbon; those destined to renew the compounds, called protein, should, on the contrary, contain much azote.

In general, those substances which contain much protein, are also strongly charged with phosphates, and the calculation of the proportions of these salts, in an alimentary substance, will probably also, hereafter, furnish a means of appreciating its nutritious qualities. This may be expected of the gelatinous substances amongst others.

As far as regards the alimentary nature of pure gelatine, it is now proved that this immediate principle is no more able to support life, when given alone, than any other. But, if animals fed on gelatine alone soon die, they do not support any better a regimen of any other single alimentary principle, however nutritious it may be, such as fibrin, albumen, sugar, fat, &c. Substances containing protein (albumen, fibrin, casein), and gelatinous substances (gelatine, chondrin), present the greatest analogy in the elementary composition; and they also are the most nutritious, when properly mixed; that is to say in plain language, that good broths and soups are the best food, as well for the healthy as for the convalescent and sick.

In a scale in which it is sought to arrange articles according to the quantity of nutriment contained in them, their relative digestibility cannot be considered; but it is very likely to happen that substances, poor in nutritious principles, may, on the contrary, be much easier of digestion than those which are richer.

All articles of food, as nature furnishes them to us, are mixtures pretty nearly alike; but the culinary art changes considerably their nutritive qualities. Thus a bromatological treatise on all kinds of meat would become an exceedingly complicated work. Up to the present time the assimilable property, that is to say, the richness in azote, has only been studied in certain vegetable products, especially in those which serve as food for herbivorous and graminivorous domestic animals.

Azote has been found in varying proportions in 100 parts, well dried, of each of the following substances, viz:, in

Rice	1·39
Potatoes	1·50
Turnips	1·70
Carrots	2·40
Rye	1·70
Maize	2·00
Barley	2·00
Wheat	2·20
Oats	2·20
Peas	3·80
Pulse	4·40
Beans	5·10
French Beans	4·50
White Bread	2·27
Black Bread	2·63
Artificially made Bread from Glasgow	2·17
Meal from Essex	2·17
Meal from Canada	2·21
Three species of agaricus respectively	4·60 4·20 3·20

To these tables M. M. Schlossberger and Kempt have added the results of their recent chemical researches on food, obtained both from the animal and vegetable kingdoms. In order to ascertain the quantity of azote contained in any given organic substance, they have adopted the method of Will and Warrentrapp, and weighed the ammoniuret of platinum, obtained by the combustion of 100 parts of the substance, when completely desiccated. Thus 0·438 grammes of human milk gave them 0·110 of ammoniacal platinum, equal to 1·59 of azote; 0·404 grammes of cow's milk, desiccated in a water bath, being much richer in azote, gave, by combustion, 0 241 of ammoniacal platinum, equal to 3·78 of azote.

Then, taking female milk as an equivalent, and marking it 100, M. M. Schlossberger and Kempt have given the following scale of the nutritious properties of different kinds of food.

Female Milk	100
VEGETABLE FOOD.	
Rice	81
Potatoes	84
Turnips	106
Rye	106
Maize	100—125
Oats	138
Barley	125
Wheat	119—144
White Bread	142
Black Bread	166
Bread from Glasgow	134
Beans	320
Peas	233
Pulse	276
French Beans	283
Three species of agaricus respectively	289 264 201
ANIMAL SUBSTANCES.	
Female Milk	100
Cow's Milk	237
Cheese	231—447
Yolk of Egg	305
Crab's Liver	471
Oysters	305
Mussels	328
Mussels Boiled	660
Eels	434
Eels Boiled	428
Salmon	776
Salmon Boiled	610
Bullock's Liver	570
Pigeon's Liver	742
Ham	539
Ham Boiled	807
Soup	764
White of Egg	843
Flesh of the Crab	859
Flesh of the Ray	859
Flesh of the Herring	910
Flesh of the Herring Boiled	848
Roe of the Herring	924
Flesh of the Sturgeon	920
Flesh of the Sturgeon Boiled	816
Flesh of the Turbot	898
Flesh of the Turbot Boiled	954
Flesh of Pigeon	756
Flesh of Lamb	833
Flesh of Sheep	773
Flesh of Sheep Boiled	952
Veal	873
Veal Boiled	911
Beef	880
Beef Boiled	942
Lungs of the Ox	931
Cleaned Muscular fibre of the Eel	908
ditto ditto Salmon	983
ditto ditto Herring	114
ditto ditto Turbot	988
ditto ditto Sturgeon	988
ditto ditto Ray	957
ditto ditto Pigeon	775
ditto ditto Lamb	[illegible]
ditto ditto Sheep	921
ditto ditto Ox	935
ditto ditto Pig	892
Pure Protein	1,006
Pure Albumen	996
Pure Fibrin	999
Pure Casein	1,003
Pure Gelatin	1,128
Pure Chondrin	910

America.

TRISMUS NASCENTIUM.—Dr. Marion Sims, of Montgomery, Alabama, has published the following views on the pathology and treatment of the Trismus of new born infants, in the *American Journal of Medical Sciences*. After alluding to the universal presence of Trismus nascentium, under every variety of climate, and in every class of society, Dr. Sims proceeds to point out the various explanations which have been given of its causes. Of these Dr. Sims mentions irritation produced by retained meconium, cold and a vitiated atmosphere, excessive purgation, and costiveness, injury inflicted by cutting the cord with dull scissors, inflammation and ulceration of the umbilicus, pouring cold water on the head in performing the ordinance of baptism, the want of swathing or proper bandaging, the application of scorched linen or cotton to the navel, the smoke of burning wood, &c., as causes which have been proposed by different authors as exciting the disease. Dr. Sims then proceeds to give some cases of his own observation of which the following is an interesting one: Mr. Henry F. Stickney's negro woman, Patsey, aged twenty-six, of a light bronze colour, gave birth to twin girls, in July, 1844; this was her fourth pregnancy. On the 15th July, 1845, she was taken in labour at the end of her fifth pregnancy, and delivered about midnight of twin girls again. The birth of the second child was more tedious than that of the first. It was still-born, several minutes elapsing before respiration could be fully established. It was larger than its predecessor by a pound or more. They appeared to be doing very well, till Monday evening, the 21st (6th day after birth), when the second child refused to suck, became restless, and seemed to be unable to open its

mouth. On Tuesday it screamed and cried a good deal, appearing to be in great distress, its jaws still closed, with the addition of occasional attack of jerking or spasms. On Wednesday, about seven o'clock, P.M., Dr. Sims saw it for the first time, being forty-eight hours from the time of attack. Its body was rigid; legs straight and stiff, there being a just balance between the flexors and extensors which held them parallel; the toes everted and heels resting against each other. If the heels were separated and then let loose, they suddenly flew together like the blades of spring forceps. The arms were pinioned to the sides; the forearms flexed firmly at right angles; the hands clenched tightly; and the jaws closely locked. The least effort to extend the forearm caused great pain, and excited general clonic spasms. To open the hands was impossible. The expression of countenance was mild and serene, notwithstanding the great rigidity of the body and extremities, till the supervention of clonic spasms, which happened every few minutes, either spontaneously, or as the result of some external exciting agent, such as sound, motion, or the alighting of a fly on the face, when the whole frame seemed to become more rigid, the hands more tightly clenched, with a quivering motion, giving the child the appearance of shaking the fist; the jaws more closely locked, the head jerked backwards; the lips compressed; the angles of the mouth widely retracted; the eyelids spasmodically closed; the cheeks elevated, thus giving the face a most horrid, sardonic grin; and all accompanied with a pitiably mournful, whining cry. This aggravation of symptoms, lasted for a few moments, passing off to give place to the former calm expression of countenance, though not attended by any relaxation of the muscles of the body and extremities. This scene of comparative tranquillity lasted but a short time, from three to fifteen minutes, and then the clonic spasms as already described again came on. Deglutition was somewhat impeded, but not suspended. The condition of the pupils could not be ascertained, in consequence of spasms being excited by any effort at separating the lids; respiration greatly accelerated; bowels costive. It had taken syr. rhei., magnesia, and occasionally tr. opii, but with no effect. Ordered a warm bath, calomel, oil, and enemata. On the next day (Thursday) the child was worse; all the symptoms being aggravated. An antispasmodic was ordered. The child rested better, but on the following morning (Friday) he was much worse, being quite unable to swallow, the spasms more frequent, and the general rigidity greater. Dr. Sims now commenced experiments on the reflex action of the excito-motory system.

To show the great rigidity of the frame, he caught hold of the feet and raised the whole body without flexing the thighs on the pelvis. At last he ran his hand under the head for the purpose of elevating the body in the same way, when he immediately detected a remarkable irregularity in the feeling of the bones. The child had laid during the whole of its illness exactly in one position, the weight of the head resting wholly on the os occipitis. Its pulse was now uncountable; respiration more frequent than Dr. Sims had ever seen it before under any circumstances; it was breathing 120 times in a minute, and looked as if it could not possibly live an hour. He raised it up to examine the head more particularly and sat it on his knee, or rather leaned it against the knee, for the tonic rigidity of the muscles prevented the flexure of the thighs to a sufficient degree for the sitting posture. After holding it so for some ten or twelve minutes, a rapid amelioration of all its bad symptoms took place! The tonic rigidity remained the same, but the clonic spasms became less frequent and less intense; the whole expression was less disturbed and the respiration fell, in this short space of time, from 120 down to 70 in a minute. Dr. Sims now felt convinced that position had a great deal to do in the production of this disease.

On examining the head, he discovered that the fontanelles were open and very large, particularly the anterior, that the bones were loosely attached by their commissures, and that the os occipitis was pushed in on the brain, being overlapped for a quarter of an inch or more along the whole course of the lambdoidal suture, by the edges of the essa parietalia. He had the child laid on its side, so as to take the weight of the body from the os occipitis. It died about sundown, on Friday, 25 July, having been sick about 96 hours.

At the post mortem examination, the following appearances were observed.

No emaciation; countenance tranquil; slight cadaveric discoloration of back.

Head.—Anterior fontanelle large, triangular; coronal suture open in its full extent; sagittal same, open to ossa nasi; parietal bones overlap the frontal slightly; the occipital for the fourth of an inch along the whole of the lambdoidal commissure; gentle pressure on the occipital bone projects the brain forwards, producing a considerable fullness of the anterior fontanelle.

Brain.—Superficial vessels full of black blood, particularly posteriorly. Interior of the brain natural in appearance.

Spine.—Coagulum of blood occupying the spine in its whole length, enveloping perfectly the medulla spinalis; thicker as it approaches the brain. Spinal veins full of black blood.

Thoracic and abdominal viscera healthy; nothing unnatural about the appearance of the umbilicus.

Dr. Sims then proceeds to give a description of the anatomy of the parts with which of course we need not trouble our readers; after which he begins to explain his peculiar views on trismus nascentium which we shall lay before our readers fully. According to Dr. Sims then the head, by the labour, is elongated in the occipito-frontal diameter to its greatest possible extent, and it is consequently diminished in its vertical diameter to its smallest dimensions, by the parietal bones overlapping the occipital through almost the whole length of the lambdoidal suture. The edge of the occipital is always forced up under the edges of the parietal, at the posterior fontanelle, in every labour. There is not an exception to this rule. Now, as the parietal are compressed laterally, to diminish the biparietal diameter, they exercise a degree of traction over the "pars occipitalis" (independently of the forces acting on it from behind), drawing it upwards in a line towards the anterior fontanelle, and thus shortening the vertical diameter. After birth, the bones of the head gradually acquire their proper relative position: the head loses measurably its elongated shape; its vertical diameter increases; the occipital slides slowly from under the parietal; the frontal becomes more prominent; and the whole cranium assumes the normal oval appearance that of right belongs to extra-uterine life.

Now, suppose the fœtal cranium is not sufficiently well ossified to regain its proper shape by its own inherent elasticity; or, suppose the child is imprudently retained for a length of time in the recumbent posture on a hard mattress or a folded blanket with a little bit of hard old quilt, or a bunch of dirty clothes (as often found amongst negroes), wadded up and stuck under the occiput, what will be the consequence? Why, the occipital bone, instead of regaining its proper position, will be pushed further under the edges of the parietal; and the whole weight of the head resting on the occipital protuberance will thus force the *entire* "pars occipitalis" upwards. If this condition be persisted in, the whole cerebral mass will be displaced; the cerebellum will be compressed between the fossæ cerebelli and the tentorium; and it will thus be tilted forwards so as to produce great pressure on the whole tract of the medulla oblongata as it rests on the basilar process of the os occipitis. What is the result of this long-continued mechanical pressure, with its peculiar displacements? The circulation through the sinuses and veins of the brain is retarded; the compression of the cerebellum obstructs the cerebellar veins; the posterior edge of the foramen magnum becomes a constricting point on that portion of the medulli-spinal veins which empty their blood into the inferior cerebellar; the force communicated to the medulla oblongata powerfully obstructs that portion of the medulli-spinal veins which run forwards over the anterior or lateral edges of the foramen magnum to empty themselves into the petrosal sinuses; and thus the spinal venous circulation, as connected with the brain, is entirely cut off.

What is the consequence of this constriction, this ligaturing, as it were, of the medulli-spinal veins? Why, at first, there is a simple venous congestion within the dura mater of the cord, produced exactly in the same way that it is effected in the veins of the hand and forearm in the ordinary everyday operation of venesection. After a while the long tortuous network of thin delicate medulli-spinal veins is overcome by the persistent constriction above; the blood is extravasated within the dura mater of the cord, enveloping the medulla spinalis perfectly; and then we have the aggravated symptoms that always mark this infallibly fatal stage of the disease.

What is the reason that extravasation does not take place as soon as the constriction is made at the edges of the foramen magnum? Because the medulli-spinal veins communicate by transverse branches with the great spinal lying exterior to the dura mater, and thus the blood is carried into the general circulation by their anastomoses with the vertebral, intercostal, azygos, lumbar and sacral veins. But let the child remain long in this position and this collateral circulation becomes obstructed. By force of gravitation the spinal veins all become congested; there is no visa-tergo to drive the blood horizontally forwards, or, rather (as the child lies on its back), perpendicularly upwards; it almost ceases to flow; and the medulli-spinal ligated above and dammed up on all sides, having no outlet for the blood brought down by the anterior and posterior spinal arteries, must necessarily very soon yield and pour out their contents within the tube of the dura mater. Dr. Sims thinks it clear that the assemblage of symptoms constituting trismus nascentium is the result of pressure on the spinal cord exerted by venous congestion and extravasation; and equally clear that this effused blood is produced in the way that I have described.

Dr. Sims afterwards relates several cases illustrative of the probability of his theory.

England.

[The following are the only articles of interest to the profession in the last number of the Lancet.]

INTESTINAL HÆMORRHAGE.—DEATH.—Dr. Ormerod relates two fatal cases of intestinal hemorrhage which occurred in St. Bartholomew's hospital, under the care of Dr. Roupell. The first was that of a policeman, aged forty-four, a large, well-made man, married, and temperate, who was admitted on the 22nd of October, 1845, in the following state:—Flesh flabby; face dull; surface of the body quite blanched; tongue moist, with a thick brown fur on the dorsum, elsewhere pale and smooth; pulse 100, soft, thready, with a little thrill; bowels relaxed; profuse discharges of red coagulated blood from the bowels during the previous three months. He had been liable to attacks of giddiness; one severe attack three years ago he particularly remembered; but he was not aware that he had any discharge of blood from the bowels about such times. Three months before admission, he casually noticed, for the first time, that a large quantity of blood was mixed with his evacuations; he was not ill at the time, nor did he afterwards feel ill; since then he had vomited blood, from time to time, in small quantities, and had repeatedly passed large quantities from his bowels; he had gradually become so weak, that, eleven days

before admission, he laid up in bed from sheer exhaustion. After he laid up, a sore formed on the sacrum; he slept well; his appetite was moderately good; and, were it not for the colour of the evacuations, he would be quite unaware of any disorder of his alimentary canal. On auscultation, the heart's sounds were heard quite distinctly without any murmur; beneath the right clavicle there was some crepitation, with long expiration and pectoriloquy. He continued in the hospital during twelve days, getting gradually weaker, though he passed hardly any blood from his bowels during that period. He had not perfect control over his bladder or rectum; but as he appeared to suffer much when disturbed from the dull, sleepy state in which he always lay, no accurate examination was made of his condition, and he died on the twelfth day. The following appearances presented themselves at the post-mortem examination:—Limbs rigid; blood generally firmly coagulated in fibrinous and coloured clots. The coagula filled the cavities of the heart, and one extended into the aorta, whence a clot was withdrawn long enough to reach to the popliteal space. The veins also contained coagulated blood, and the clots in the auricles were plainly continuous with those in the ventricles. The heart was large, pale, and healthy in structure, but there were four pulmonary valves, one of them much smaller than the other three. The right pleura was universally firmly adherent; the left was free. Lungs generally slightly emphysematous, pale, remarkably destitute of blood in front; but here and there was a little congestion from gravitation, in which, on the left side, were some scattered granular masses of pale-grey tubercle. The same pale-grey tubercle was extensively deposited about the apices, especially the right, the tubercular matter was hardly distinguishable by colour from the rest of the pale-grey tissue of the lung. In the middle of the right apex was a single cavity, hardly so large as a hazel-nut, with smooth walls, lined by an opaque, soft, white membrane. The stomach and intestines, both small and large, were healthy, with the following exceptions:—Just beyond the pylorus was a large excavated ulcer, which had eaten through all the coats of the duodenum, and the base of which was formed by the apparently healthy pancreas, to which the edges were firmly attached. The ulcer might have been an inch and a half in diameter. The whole of the parts in the neighbourhood were coated with a thick layer of mucus; but there was no blood, nor any visible trace of vascular action, nor was it ascertained what artery had been laid open. The liver and spleen were, in all respects, quite natural. The kidneys were small, hard, pale, and tough, breaking with an irregular fracture. The capsule of the kidney was firmly adherent; the surface exhibited a few small cysts. On section, the cortical structure seemed rather deficient, and was marked with a scanty, buff-coloured deposit. The second case was that of a woman, aged twenty-four, delicately formed, admitted on the 24th of February, 1846. This patient appeared in the last degree of anemia. Face pale, quite bloodless, pulse rapid, like a thread; tongue moist and pale; gums crusted with blood, and spongy; numerous purpura spots on the chest. She lay on her right side, and was hardly able to whisper her complaints of intense pain in the head, and profuse bloody discharge from the bowels. She had always had good health, and since her marriage, twelve months before, had never had a day's illness till the present attack, which commenced gradually, with pain in the limbs, and weakness, and advanced so far as to lay her up a month before admission, suffering from pains and weakness, and passing blood from the rectum, which was said to be obstructed by hemorrhoids. She had had all the necessaries of life, and had never complained of anything beyond habitual constipation before this illness began. The blood mixed with the evacuations from the intestines was red, and partially coagulated. On auscultation, metallic clique was heard, loudest at the base of the heart, with the first sound; also a systolic murmur at apex and base, in the pulmonary artery and aorta; between the base and apex a double friction sound was distinctly audible, and there was an intensely loud murmur in the jugular veins. All the ordinary styptics having been tried without any effect, as they were constantly rejected by the stomach, the patient was ordered stimulants, wine, a blister to the region of the heart, and to take five grains of gallic acid every four hours. The next day her bowels were much less relaxed, the motions dark, with some fæcal matter. She had retained the medicine, and had no vomiting. Ordered to continue the treatment; to increase the quantity of wine from six ounces to ten ounces. On the 26th she was more lively, smiled, and expressed her feelings; she was perfectly free from headache; pulse 132, like a thread, tongue dry, rough, and brown, with some white papillæ; she had passed three liquid evacuations, with a sooty sediment. Her feet were a little œdematous, as they had been all along. Ordered to continue the same treatment. In the evening she asked for a cake, which she ate, and did not subsequently reject. She gradually changed during the night, passed three red, bloody evacuations; the next *morning* she lay on her right side, quite pale, with a rattling in her throat, and died about mid-day. On examination after death: The blood in the large veins was evidently quite watery; in the auricles the coagula looked like thin jelly. The lungs and pleura were considerably diseased. The heart presented spots of purpureous matter, its surface was dotted with bright red spots, and the serous membrane was puckered into wrinkles. The stomach was of the natural size, containing a good deal of closely adherent mucus, with dark shreds, as of altered blood. Through this coat of mucus could be seen numerous purpura spots in the mucous membrane of the stomach, with some distinct depressions, the result of follicular ulceration, chiefly occupying the great curvature, nearer the cardiac than the pyloric end of the organ. The duodenum was healthy; the jejunum and upper part of the ileum were marked here and there with dark stains, having a honeycomb appearance, probably disorganised Peyer's glands. The colour of these patches became more livid on descending the ileum. The situation of all of them was distinctly marked on the peritoneum by dark purple stains, dotted with little opaque, white spots, some of which also were scattered on the mucous surface of the lowest of the patches. The solitary glands were generally enlarged. The colon was ulcerated throughout; there were large patches where the mucous membrane had been removed from the walls of the intestine, and now hung down in brown sloughy strings, and hundreds of smaller ulcers, out of which small round sloughs were protruding. The large patches were chiefly in the ascending colon, the smaller round ulcers were pretty evenly distributed, only larger, and apparently of longer standing near the upper end of the colon. The upper part of the rectum was comparatively, but not absolutely, free from ulceration: this part of the intestine was rather contracted, but below where the canal was again distended the ulcers appeared as numerous, though not so large, as those above. All the ulcers had a thickened base, surrounded by an elevated ring of mucous membrane; in the more recent ones the mucous membrane could be turned aside, and a slough of cellular tissue removed with little difficulty, a little crack only remaining in the membrane, without any loss of substance; only in the more advanced had any of the lining of the intestine been destroyed. There were marks of vascular action round many of them, as well as round some of the hundreds of circular ulcers that existed above, as also some of the solitary glands, which were enlarged, but had not yet ulcerated, in the lower part. The mesenteric, and especially the lumbar glands, were large, soft, red, with white deposit; there was some sub-serous ecchymosis in the mesentery and omentum, and a little pure blood had gravitated into the pelvis. No blood was found anywhere in the intestines, only some bilious chyme in the upper, some dark fæcal matter in the lower part of the small intestines, and a small quantity of solid, dark fæces in the colon. The liver was large and flabby, the right lobe constituting almost the whole bulk of the organ. The upper surface was connected by tough, old adhesions to the under surface of the diaphragm, the under surface less firmly to the spleen. The spleen was large and hard, presenting two or three pale buff spots, one of them corresponding to a white patch on the capsule, while to another a flocculus of fresh fibrin hung. On section, the largest appeared about two-thirds of an inch in diameter; they were hard, yellow masses, surrounded by more or less vascular congestion. The kidneys were pale, having exactly the appearance of lumps of fat; their texture and structure under the *microscope* was quite healthy. The uterus was pale, small, and empty. The right ovary contained a cyst filled with dark fluid, and the left presented a corpus luteum. In this case the benefit derived from the internal exhibition of gallic acid was marked, for a short time, but the patient apparently was too much worn out by the disease to receive permanent benefit from any remedy.

NEUROMA.—The case of an ostler, aged forty-five, affected by neuroma of the posterior tibial nerve, treated in the Royal Free Hospital by Mr. Gay is reported. The patient was muscular, of middle stature, and was admitted on the fifth of September, 1845, complaining of dull gnawing pain along the course of the sciatic nerves, increased by pressure, occasionally shooting with great severity along the posterior tibial and the articular nerves of the knee, the peroneal, saphena, and other cutaneous nerves of the leg. Behind the trochanter, the pain was constant, but in other situations it was lancinating and irregularly paroxysmal; though most severe and frequent at night; foot benumbed; nights almost devoid of sleep; appetite gone; flesh and strength wasting; pulse feeble; and the patient unable to follow his usual occupation. The symptoms commenced about two years previously, with slight sciatic pains, which continued to increase and extend, until they became insufferably severe. On examining the course of the nerves, a tumour about the size of a large walnut was discovered above the tuberosity of the os calcis, and wedged in between the tendo-Achillis and the posterior aspect of the tibia; firm and inelastic; capable of being moved from side to side, but not upwards and downwards. Squeezing it gave severe pain, increased numbness of the foot, aggravation of the neuralgic pains, which he had so long endured, and arrested the circulation through the posterior tibial artery. These symptoms led to a strong suspicion that the tumour was connected with the posterior tibial nerve, and, from the evenness of surface, and regularity of shape, Mr. Gay thought it might be a cyst. Under this impression, Mr. Gay *recommended* that the contents of the cyst should be evacuated, and an attempt made to consolidate it by exciting suppurative inflammation of its parietes. A tolerably free incision was accordingly made, with great caution, into the tumour, parallel and close to the edge of the tendo-Achillis. This gave rise to profuse and bilious arterial hæmorrhage (only checked by powerful compresses above and below the wound) and increased numbness of the sole of the foot. An attempt was made to set up suppurative inflammation, but desisted from on account of the increased neuralgic pain it occasioned. No diminution in the size of the tumour followed these abortive attempts at treatment, but a small fungous growth sprung from it. Mr. Gay now determined on excising the tumour, which he did on the 11th of November. A free incision was made over the tumour parallel to, and about a quarter of an inch from, the inner edge of the tendo-Achillis, which laid it bare. From its lateral connexion, excepting the posterior tibial artery and veins, it was easily separated; and on proceeding to its superior and inferior attachments, it became immediately evident that the seat of the tumour was the nerve. The vessels were carefully looked for, and found imbedded in a groove on its posterior aspect, and firmly attached to it by cellular tissue. An attempt was made to separate the vessels, but

the difficulty appeared to be insurmountable, and it was decided to be less hazardous to put a ligature on the artery, both above and below the tumour, and to remove the included portion by means of a sharp and strong pair of scissors together with the diseased portion of the nerve About two inches and a half of the nerve, artery, and veins, were thus removed. Considerable hæmorrhage attended the operation; ligatures were applied to the bleeding vessels, and cold applications made to the wound; which, after half an hour, was closed by sutures. A distressing sense of numbness in the foot followed. The tumour was found to consist of, first, the ordinary neurilemma, and a layer of nervous fibrin, separated and regularly expanded over a thick, tough, and fibrous cyst, which was about the size of a walnut. This cyst contained minute cells, some filled with serous, others with bloody fluid. At the point where it had been punctured it had not healed, but the contained cellular growth had made its way through, and evidently formed the small fungous mass which had protruded. The patient suffered severely from pain and fever after the operation. After the healing of the wound, however, the sensibility in the sole of the foot gradually increased, and he had more power of moving his toes, though motion was principally confined to extension. He suffered severely from shooting pain in the course of the plantar nerves, and the remaining portion of the posterior tibial nerve, to the point of its division; but the sciatic and other pains which he had endured prior to the operation had quite left him. These pains commenced behind the inner malleolus, and lancinated along the plantar nerves. On the 1st of March, three months and a fortnight after the operation, the whole of the skin of the heel and sole of the foot was still benumbed, but he had more sensation in the toes, excepting the great toe; the shooting pains in the foot continued to return frequently during the night as well as day, and were brought on by using the foot in walking, but relieved by rest and rubbing in the tincture of aconite. The patient was unable to control and direct the movements of the foot with a precision sufficient to ensure an accurate fulfilment of the purposes of the will, unless the eye kept simultaneous watch over them. In ascending a flight of stairs he could not raise the leg to the exact height required for a single step, unless he kept his eye on the foot during the movement, and this assistance from his visual organs was required for each successive step. In standing no reliance could be placed on the defective foot. In walking great attention was required; and if, by accident, he set the foot on a small stone, or other body, which affected the evenness of surface, he lost his balance and fell.

Injections into the Uterus.—Mr. Tripe relates two cases showing the utility of injections into the uterus in certain conditions. The first case was one of passive hæmorrhage after labour, occurring on the twelfth day. The blood was red, containing small dark clots occasionally. The system was very much depressed; pulse 130, small, and jerking; face deadly pale; lips colourless; head hot; extremities cold, and skin clammy. The uterus was very high up; the fundus anteverted, in consequence of which the patient had difficulty, with frequent desire, of micturition. The os, looking almost directly backwards to the sacrum, was almost out of reach of the finger; but on hooking it downwards, it was found patulous, and nearly as large as a halfpenny. The finger passed into the uterine cavity, which appeared as large as a small egg, and was empty. No contraction occurred from the manipulation. A pint of cold water was injected into the vagina and womb. Ergot of rye and tincture of sesquichloride of iron were ordered every two hours, half a grain of oxide of silver, mixed with starch-powder, to be given during each interval, and a dose of black draught directly. The hemorrhage continued profusely, and the general symptoms increased in intensity. Four ounces of cold water, containing ten grains of tannic acid, were injected into the cavity of the womb, care being taken that but little force should be used, and that the tube should be carried within the os uteri some wine was also administered. After this the flooding ceased, and slight lumbar pains occurred. A clot was discharged of the size and shape of the cavity of the womb, with white fibrillæ attached to its surface. The patient recovered rapidl afterwards. In the second case injections of tannic acid were administered with much benefi in a case of profuse menorrhagia. Oxide of silver was at the same time administered internally and subsequently the sulphate of iron was taken.

Melanosis.—Mr. Holmes Coote reports two cases of melanosis (for which he is indebted to Mr Lawrence), and copies two cases from contemporary journals. The cases by Mr. Lawrence are of the ordinary kind, and neither in them nor in Mr. Coote's remarks on them, are there any points worthy of being transferred to our pages.

Placenta Prævia.—Mr Lloyd briefly record a case of Placenta presentation occurring in a twin pregnancy. Slight hemorrhage came on in the eighth month, and continued to a small exten for four or five days. A more severe discharge of blood then occurred, and Mr. Lloyd was sent for. During his visit a large gush took place, and the patient fainted. Mr. Lloyd therefore immediately proceeded to dilate the os uteri, passed his hand between the placenta and its attachments and, feeling a foot, ruptured the membranes. Slight pains came on and a small female child was delivered in a state of asphyxia. The usual means revived it however. On examining the patient another foot was found presenting, and a second female child was delivered also asphyxiated; this was also restored. The uterus was grasped by the nurse, and a firm bandage applied, the organ contracted and the placenta was expelled. The patient recovered, Mr. Lloyd states that he imagines the placenta in this case to have been attached, completely over the os uteri. This seems doubtful however. It was the patient's sixth pregnancy.

Neuralgia of the Uterus.—Mr. Davis mentions the case of a lady of full habit, aged twenty-five whom he attended in her confinement, and who progressed favourably towards recovery until the sixth day, when she complained of severe pain in the region of the uterus not aggravated by pressure. There was no fever nor any derangement of the circulating or digestive organs. Opiates and other sedatives were freely administered, both in a solid and liquid form, without benefit. The pain was intermittent in its attacks and during the intermissions, pain, was referred to the face, but not considered of much consequence by the patient. Various means were used to relieve the pain, and amongst other remedies calomel was administered, after which the pain in the face became more severe, and the patient, supposing it to arise from toothache, surrounded the parts with flannel. This circumstance led Mr. Davis examine the mouth, when he found the posterior part of the gum enlarged, red, and swollen. One of the dentes sapientiæ, was coming up; the gum was freely lanced, and the pain in the uterus from that moment subsided.

The Address to the Surgical Society of Ireland—by Mr. Carmichael, had been previously published in our number for May 23rd, 1846, page 160.

ORIGINAL LECTURES.

COURSE OF LECTURES ON PRACTICAL MIDWIFERY.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

Delivered last session at St. Bartholomew's Hospital,' and revised by the Professor for the "Medical Times.

LACERATION OF THE PERINŒUM.

At our last meeting, gentlemen, I mentioned to you the fact that laceration of the perinœum, has been known to occur from the earliest periods, and that it is alluded to in the old Testament. I now have to inculcate the necessity of supporting this part, and to state to you the best means of doing so. I have before told you that towards the close of labour the perinœum becomes excessively distended by the pressure of the head against it, in fact in many cases it becomes so thin as to appear almost membranous, and to allow the inequalities of the child's head to be visible through it. To a person unacquainted with the dilatability of the parts, this immense distention would seem almost incredible, and this is the time when the danger of laceration may be said to commence. It is therefore well to be in readiness and to have a hand in the neighbourhood, when the head is distending the os externum for fear the head should suddenly burst into the world and thus rupture the perinœum. In primiparæ the frenulum perinœi is almost always lacerated, but this laceration ought not to extend further, which without great care it is very apt to do; in primiparæ therefore your utmost attention will be needed, both on this account and because the parts having never been distended before are not so dilatable as in females who have had many children. There are two periods when this laceration is most to be feared, one is when the head is passing into the world, the second and the most dangerous, during the passage of the shoulders. Often a slight rupture, as of the frenulum, during the passage of the head becomes a serious laceration during the delivery of the shoulders. Permitting the head to remain in the state of crowning during the interval of a pain assists greatly in dilating the parts, and preparing them for the passage of the shoulders.

The usual plan of supporting the perinœum recommended by writers on midwifery, is that by the right hand; I prefer using the left, gentlemen, because I have then the right hand free to perform any little manual operation about the child which may be necessary. You will find the position with the left hand rather tiring at first, but a little practice and dexterity will soon enable you to overcome this, and will make the use of the left hand quite easy. The use of the left hand is the plan generally employed by the Scotch practitioners. The best position for your patient during this period is that mentioned in my last lecture, I mean the usual one on the left side. Towards the middle of the fourth stage of labour when the pains are becoming pretty active and rapidly repeated it will be necessary for you to prepare for supporting the perinœum. You should apply a soft napkin to the perinœum and place your hand on this, both for the sake of cleanliness and to prevent the hand from slipping, and this napkin should be changed when wet. You will then place your hand with the palm towards the anus, and with the middle finger well over the centre of the perinœum. It is of considerable consequence to employ the pressure well and directly on the centre of perinœum. In order that you may be sure that you have your hand applied exactly in the centre of the perinœum you should place the examining finger of the right hand against the posterior margin of the os externum. If you apply the left hand so that the middle finger of it meets and touches the examining finger of the right, you may be sure your hand is in its proper position. Bear this in mind, gentlemen, bad support is worse than none at all. When the head is bulging out you may know by feeling the frenulum perinœi with your examining finger, whether the pain is likely to be the last or not.] If the frenulum be not tense you may be sure there will be more pains before the birth of the head. It is not necessary for you to keep up support of the perinœum during the whole of this period. Indeed you would find such a course exceedingly fatiguing. The plan I generally adopt is to keep my hand under the bed clothes, in readiness to make pressure the moment the head comes forward. The pressure should be applied with the palm of the hand directed backwards towards the anus and it should be made in a forward direction, as by this means we press forward the soft parts, and at the same time direct the head forward and against the other parts of the os externum, so as to ensure their bearing an equal share of the dilatation, and also thus avoid

the danger of the perinæum being perforated by the head. The fingers must be kept well together so that no space should be permitted between them.

Laceration of the perinæum may be a very serious injury, as it occasionally may extend backwards through the sphincter ani into the rectum. In such a case the probability will be that the patient will be rendered wretched for life. All the discharges of the uterus and rectum coming away in one vast cloaca, your patient, gentlemen, will be a misery to herself and to her friends. Fortunately, however, although considerable lacerations of the perinæum are not uncommon, they seldom extend through the sphincter ani; they usually take an oblique direction, and pass by the side of this muscle, and, of course, in these cases the rectum is rarely exposed to injury. Wounds in this situation are very disinclined to heal, partly on account of the difficulty of keeping the parts perfectly motionless, and partly on account of the irritation, caused by the discharges of the parts entering between the edges of the wound. Some practitioners have recommended that in the treatment of perineal laceration, the bowels should be rendered costive by a dose of opium, in order to prevent the wound being torn open by the passage of fœcal matter. In all cases, gentlemen, in which you may be so unfortunate as to meet with laceration of the perinæum, whatever may be the treatment you intend to pursue with regard to the permanent cure of the patient, let me advise you never to give a dose of opium to produce constipation of the bowels after her labour. Depend upon it, more harm than good comes of this measure; if the parts slightly or considerably unite, as by attention to rest and and cleanliness they often will do to a considerable extent, the passage of the hardened fæces after several days constipation will be sure to tear their edges asunder again, and you will then have your patient in a worse condition than before. Instead, therefore, of endeavouring to constipate the bowels, you should, on the contrary, render them as relaxed as possible.

My friend, Dr. Dieffenbach, of Berlin, has operated on many of these cases with great success. The following is the method he employs. Having pared the callous edges of the wound, he inserts very fine hairlip pins, with the twisted suture, bringing the parts accurately together; he then makes on each side of the laceration an incision through the skin and cellular tissue, which he dresses with charpie, so that the central wound is, as it were, completely isolated and removed from all danger of being disturbed by the patient's movements. The lateral incisions are allowed to heal by granulation. Dr. Dieffenbach, however, contents himself with attempting the union of the posterior two thirds of the wound only. I believe, gentlemen, the great fault in the treatment of perineal lacerations, is, that we attempt too much; by endeavouring to obtain union of the whole surface, the tension of the parts is greatly increased, so that the chance of union is much lessened; besides which, if you should obtain union of the part, the perinæum will be so contracted, that should the patient again become pregnant, laceration will be sure to occur during her labour.

Some writers have stated that support of the perinæum, during labour, is quite unnecessary. One of the arguments advanced by authors supporting this view is, that among savage nations it is never employed; but these gentlemen have entirely omitted to take the smaller size of the head among savage tribes, into the account. Besides this, women among savages, generally speaking, are more inured to hardship, and are ...y stronger, and bear pain better. Cases may occur, certainly, in which support of the perinæum may not be required, and on the other side of the question, cases do occur continually in which, in spite of all the care of the medical attendant, laceration cannot be prevented. Some surgeons have stated that they have never had a case of perineal laceration. Such gentlemen cannot have enjoyed a very extensive midwifery practice. One thing seems to deceive practitioners; that is, that the parts contract very much and a rent which, at the time of its occurrence when the parts were distended, appeared enormous, would, in the course of day or two, be scarcely worth speaking of.

When the head comes down very suddenly and the os externum is rigid, the perinæum may give way in the centre only, if assistance be not at hand; this, gentlemen, is called *central laceration of the perinæum.* The child in these cases is born through the aperture, and the frenulum perinæi is left uninjured. This chiefly happens in cases in which the part is unusually broad. I have witnessed two cases of this accident, and in neither one was the rectum injured. In these cases I merely ordered the patient to be kept quiet, and the parts to be kept very clean for 48 hours, and I found the rent contracted considerably. In about six days the opening remaining was barely sufficient to admit a catheter. This also healed eventually, and I afterwards attended the patient in a subsequent pregnancy, when she was delivered *per vias naturales* without injury of the parts.

When the head is delivered, you must by no means remove the support until the shoulders have been born, for as I before told you, laceration of the perinæum is very apt to occur during the birth of the shoulders. In fact most of the worst cases of laceration are produced by the passage of the shoulders, the frenulum having given way during the birth of the head; when once a small rent has been formed, the laceration spreads very rapidly. You must therefore not remove the support, and its continuance will also be of service in preventing the uterus from being too suddenly emptied of its contents, which rapid emptying is a very frequent cause of hæmorrhage. You should never in these cases seek to expedite the delivery by manual assistance but rather to retard it.

After the head is born, before the birth of the shoulders, you should examine whether the cord be round the neck or not; and this of course you will do with your right hand, if as I advise you, you support the perinæum with the left. If you should find the cord round the neck, gentlemen, what are you to do? authors recommend that it should be passed over the head of the child; but I can tell you, gentlemen, that if it be loose enough to be passed over the child's head you need not meddle with it at all.

You must endeavour to slip the cord over the foremost shoulder, and it will soon of its own accord slip over the other shoulder. All this you will find you can do much better with the right hand than with the left. You may sometimes have the cord tightly twisted round the child's neck and cutting deeply into its soft folds. Now what are you to do in such a case as this? It is very evident now, that you cannot pass the cord over the child's shoulder, still less over its head. It has been recommended to tie the cord in two places and divide it, but, gentlemen, you will not be able to do this. I advise in such a case as this, that the cord should be divided at once; the child will be immediately expelled, when you must instantly secure the cord. These cases, however, are very rare, for there are few where with a little care we cannot slip it over the shoulder. This subject, however, I shall speak of more fully when we come to the consideration of dystocia.

When the child is expelled in ordinary cases you need not be in a hurry to divide the cord at once; rather place the child in a comfortable position by the side of its mother, where it can enjoy the warmth of her body, and wipe out its mouth with a soft napkin. As soon as the child has cried stoutly, the respiration is pretty well established, and the pulsations in the cord have ceased, you may tie the cord. I have made many observations as to the time that elapses before this occurs, and I think that the average time before the action of the child's heart is fully established, is about six minutes. Bear this in mind: you should never tie the cord before the circulation of the infant is fully established.

The mode of tying the cord is in my opinion of some importance. It should be tied as tightly as possible at about two inches from the umbilicus, and a full inch should be left beyond the ligature, because when the cord shrinks the ligature is very apt to slip off. Some practitioners put on two ligatures before cutting the cord and then divide it between them; I do not see any necessity for this, as, even in twins, the circulation is, as I told you on a former occasion, perfectly distinct. I think the loss of the few drachms of blood contained in the placenta, rather advantageous as it lessens its size, and permits it to be more easily expelled. The same rule of following nature which induced some practitioners to imagine that the perinæum did not require support made others suppose that the cord did not require tying. The contusion of the cord from the mode of cutting it, or rather bruising it asunder among savage nations, and the laceration of it by animals in their mode of separating the placenta by biting the cord in two, prevents hemorrhage in these cases. Analogy would therefore lead us always to cut the cord with blunt scissors. Dr. Gooch told me that he once unintentionally cut the cord on the wrong side of the ligature, but in this case the child's life was saved merely from blunt scissors having been used. On the continent some time ago, it became a fashion with some practitioners not to tie the cord at all; but this practice was soon put a stop to, by the occurrence of several severe cases of hæmorrhage. On the mode of dividing the umbilical cord among animals, I will read you the following extract from Dr. William Hunter's lectures in manuscript, as quoted by Dr. Merriman in his synopsis of practical midwifery—a work by the way, gentlemen, which I strongly recommend to your attentive perusal:—it is very short, but at the same time very valuable. Dr. Hunter says "a ligature upon the navel string is absolutely necessary, otherwise the child will bleed to death; and when tied slovenly or not properly, it will sometimes bleed to an alarming extent. As we take such vast care to secure the navel string, you will naturally ask how brutes manage in this particular? I will give you an idea of their method of procedure, by describing what I saw in a little bitch of Dr. Douglas's: the pains coming on the membranes protruded, in a pain or two more they burst and the puppy followed. You cannot imagine with what eagerness the mother lapped up the waters, and then taking hold of the membranes with her teeth, drew out the secundines; these she devoured, also licking the little puppy as dry as she could. As soon as she had done I took it up and saw the navel string much lacerated and bruised. However a second labour coming on, I watched more narrowly, and as soon as the little creature was come into the world, I cut the navel string, and the arteries immediately spouted out profusely; fearing the poor thing would die, I held it to its mother who drawing it several times through her mouth, bruised and lacerated it, after which it bled no more." This shows, gentlemen, that if the cord be bruised and lacerated there will be no fear of hæmorrhage.

As soon as the child is removed, one of your most important duties comes on, you must place your hand on the abdomen to discover whether the uterus, which now contains only the placenta and membranes, be properly contracted. This is a matter of the utmost importance, as until the fundus of the uterus has firmly contracted, the patient is not safe from hæmorrhage for a moment. Although no blood may escape externally, still the patient may be dying of internal hæmorrhage. In these cases the fundus of the uterus becomes soft and irregular, and the os uteri may have become contracted either in consequence of irritation to it from pulling the cord, or from being plugged up by the placenta or a coagulum of blood. It is therefore of the very utmost importance to examine every few moments to ascertain whether the uterus be firmly contracted or not. If the organ be firmly contracted after the expulsion of the child before the removal of the placenta, it will be about the size of a child's head, when felt through the abdominal parietes. After the expulsion of the placenta

the organ contracts yet more firmly, and becomes about the size of a cricket ball. It may be felt just above the pubes in that state. But, gentlemen that our time is expired: I must therefore postpone the further consideration of this subject to our next meeting.

A COURSE OF LECTURES ON DISEASES OF THE SKIN

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XVIII.

SYCOSIS

GENUS	SPECIES
Sycosis.	Menti Capillitii

As proposed by Startin

GENERA AND SPECIES

Sycosis.		
S. Simplex vel Tuberculata	Menti	Sparsa
S. Pustulosa	Capillitii	Confluenta
S. Crustata		Inveterata
S. Ulcerata		

Gentlemen, our meeting last week, was devoted to the treatment of a cutaneous disfigurement chiefly of the face called acne, for the most part more prejudicial to the beauty, than to the health of the individual. I am now about to direct your observation to a very similar disease which affects the same part of the body, I may say, exclusively, its site being in the sebaceous follicles of the face and head, which are permeated by the hair of the beard, whiskers, eyebrows, or scalp, and which is also, unattended with any necessary derangement of the general health.

This disease has been known to ancient and modern writers on medical subjects by the distinctive appellation of sycosis, and was alluded to by Pliny, as a malignant affection under the name of Mentagra, which term is continued by most continental authors on cutaneous diseases, since the days of Plenck as however the whiskers, eyebrows, and scalp are attacked by this malady as well as the beard, I shall prefer using the term sycosis rather than a designation which would seem to confine the complaint to the chin.

Sycosis strictly means figlike, and has probably been applied to the affection under our notice, from some real or supposed resemblance its originator may have discovered to the fruit in question. But you have only to refer to your anatomical nomenclature, to perceive how common and fashionable, this mode of designation was in bygone periods of medical history, and on what slender marks of resemblance, it was usually founded. I show you a cut fig, and a model of the disease, so that your judgment may be settled on this point at least, by the fruits of observation, the resemblance you will observe, if any be existing, must depend upon the presence of numerous small yellow pustules, which, as it were, exude a greenish yellow ground of concreted secretion; which secretion, is the product of the rupture and discharge, of former pustules. Sycosis has been considered by most writers of authority as a pustular disease, yet were it to be so considered, it would not be distinguishable from impetigo, or porrigo affecting the same part of the body. I am therefore inclined with Bateman, to regard tubercles, as in acne, to be its more characteristic signs; and would consequently define sycosis as a non-contagious eruption of inflamed red tubercles or vari, resembling those of acne occurring on such part of the face and head as are covered by hair, (the precise seat of the disease being the sebaceous follicles permeated by the hairs). These tubercular spots, may vary from the size of a grain of mustard seed to that of a pea, and may be confined to one portion of the beard, whiskers, eyebrows, or scalp, or be disseminated very generally through these parts: wherever situated, they speedily suppurate and produce a small yellow pustule which is usually transfixed by a hair passing through its centre. These pustules break, coalesce and discharge a sanious yellow secretion, which attaches itself to the hairs so as to form greenish or sienna coloured crusts; beneath which, in inveterate varieties of the disease, ulcerations are occasionally found; and it is observable in nearly every example of sycosis, that tubercles, pustules surrounding the hairs, and incrustations, are to be simultaneously witnessed.

When the hairs plucked from a pustule of sycosis, are examined by the microscope, the extremity which was inserted into the skin, is found covered with a pulpy matter extending over the whole portion which was beneath the cuticle. I have not, however, so completely investigated this appearance microscopically, as was my intention before offering you these remarks, I trust, notwithstanding, to find leisure to do so shortly, and will then furnish you with the results.

It will be perceived from this definition, that acne differs from sycosis only in the implication of the hair follicle and bulb in the latter disease. The period of life is also similar to that in which acne, in forms of rosacea, and indurata, is commonly observed; namely, from twenty-five to fifty-five years of age. The subjects attacked are also similar, no condition being exempt, and irregular livers or intemperate persons being commonly its victims. In females, the disease is only witnessed on the eyebrows and scalp. When existing on the chin and cheeks, if this ever be the case, it is not distinguishable from acne rosacea, by any characteristics with which I am acquainted. By a reference to the chart you will perceive, I have divided sycosis into four species, which indeed are but so many stages in the complaint; yet, as in other instances of cutaneous disorders, I have thought it well to institute this sub division, that the exact period and aspect of the disease might be characterised, whilst the memory might be stored with its ordinary manifestations. Thus I have [illegible] genera of [illegible] as, as S. simplex, which comprehends the tubercular erythematous condition of the eruption; S. Pustulosa, when pustules are most evident, crustata, when scabs or crusts are most conspicuous, and ulcerata for the rarer instances, where ulcerations may present themselves. The divisions are according to the position of the disease on the beard, or other parts of the head, named after Bateman and others, menti, and capillitii: whilst the varieties relating to the form or continuance of the complaint, are entitled, Sparsa, Confluenta, and Inveterata.

According to my own experience, sycosis commences, three times out of five, on the upper lip immediately beneath the nostrils, by a raised tubercular erythematous swelling, which is attended with pain, heat and pruritus, and soon becomes covered with red elevated points that end in small yellow pustules which have a hair in their centre. The friction to which the patient usually subjects the part, and the effects of the heated and perhaps acrid breath, constantly passing over them, soon produce an extension of the eruption to other parts of the beard. The skin meanwhile assumes a deep red or violet tint, which is much increased by the use of soap and the razor, and the pustules multiply, till the whole hairy parts of the face and more or less of the scalp may become affected. In other instances this disease appears to commence in a similar manner to the above on some other part of the face, or it may, like acne, appear simultaneously on all the situations occupied by the hairs; while true acne exists on the cheeks, nose, and forehead, as the sycosis advances, considerable thickening and induration of the cellular tissue, beneath the skin take place, whilst the skin itself is much hypertrophied so as to present the lobulated appearance also observed in acne Rosacea.

Modifications of this complaint from a syphilitic taint, or scrofulous diathesis are of frequent occurrence, and will be hereafter separately mentioned.

Sycosis has been considered; even in modern times, a contagious disease, but this I have no doubt has arisen from its accidental complication with some other contagious cutaneous affection, as scabies or porrigo; with the latter of which complaints it is also not unfrequently confounded but the presence of tubercles, as in the models before you, and the origin and progress of the disease, will commonly furnish a sufficiently correct diagnosis. I am not aware that seasons, have much influence in the production or development of sycosis; the malady is very prone to remissions and exacerbations and the periods of the year which witness such occurrences, vary in different individuals afflicted with the disease. Tubercular syphilitic eruptions, and the disease called Ecthyma which we are about to consider, have some faint resemblance to sycosis, when they attack the face, but the seat of these affections is not in the hair follicles, nor does the root of the hair usually manifest the same morbid changes when it may happen to be implicated besides those eruptions are rarely, if ever, confined to the only sites occupied by sycosis, but are to be found in various other parts of the body never infested with the complaint under consideration. The causes producing sycosis are even more obscure than those enumerated as influencing the eruption of acne, yet in some instances they are undoubtedly the same, and may be distinctly traced to disorders of the digestive or chylopoietic viscera. The complaint is frequently very rebellious, and has been considered by nearly all dermatologists to resist every kind of treatment, sometimes ceasing spontaneously after a few months' duration, but more commonly having a protracted existence for years, which, in a great measure, as observed by Plumbe, is owing to the local irritation of the hair, acting like a foreign body in the pustules, and continuing and propagating the morbid inflammatory action constituting the disease. You will perceive, from what I have now said, that I agree with the author just mentioned, in his observation "that the existence of hair on the part, and consequence in aggravating the inflammation, form the only difference between sycosis and acne." (*Plumbe Practical Treatise on Diseases of the Skin. P. 59 et seq.*) With this view of the disease, I can have only one addition to make to the treatment I last week recommended for acne, particularly for the species known under the designation of A. Rosacea; and this is, that as the hairs constitute the only distinction between one affection and the other, it becomes a rule, as conclusive as it is practically useful, that they should be extracted by a forceps from all the inflamed vari as fast as they appear, and thus the maladies will be rendered identical, and require only a similar treatment. As this operation is not only tedious, but painful, requiring also daily attention, it can scarcely be accomplished at once, when the disease is extensive, or when, as is often the case, it is accompanied with much incrustation and matting of the beard: it is better, in these instances, to wash and bathe the parts freely with yolk of egg and tepid water, and to use the convex-bladed scissors to short n the beard or hair, and remove it with the adherent incrustations, when a small portion can be daily placed under the operation of the forceps, until every hair growing upon the inflamed portion of integument is scrupulously eradicated. Fomentations of decoction of mallows or poppies, of linseed, or of warm water, in which a little sulphur and bran have been boiled (in an earthen vessel), are very serviceable, both before and after this operation, and I would recommend the sulphur-vapour douche as a most valuable accessory.

This bath can be readily applied by means of any contrivance, at the end of the steam-pipe, which will exclude the nose, or, as is the preferable mode, the whole face may be subjected to the sulphurous vapour, if the nose be provided with a tube for inspiration. With regard to the prognosis of this troublesome, painful, and disfiguring complaint, I must again venture to place my own experience, and the results attending the practice at this institution, at variance with the observations of the authors, who have ranked acne and sycosis as amongst the most obstinate or incurable of diseases of the skin. By paying attention to the extraction of the hairs, to the use of the scissors

instead of the razor, and to washing and anointing the parts, after the manner recommended for acne in my last lecture (the use of the lancet: cauterization being also occasionally required) and the internal treatment directed as then advised I have often succeeded in curing sycosis of twenty or thirty years' duration, in as many weeks. If the cure has not been perfect, in all instances and if relapses have occurred from time to time as in acne, yet do I believe that this disease much more under the control of the medical art than many others which have no corresponding character for obstinacy and duration. As usual I shall verify these remarks, and conclude the subject by the citation of two or three cases which have furnished the modeller with the examples before you.

The first model of sycosis to which I shall bring your notice is numbered 6043; it is that of George Richardson, aged 38, residing in Cotten's yard, Hackney Road. He was admitted patient on the 29th of August, 1845, having suffered upwards of two years from his disease, which is very fairly represented by the cast you are inspecting. You will perceive that nearly the whole surface covered by the beard and whiskers is implicated in this loathsome looking malady; and, if I remember rightly, the eyebrows were also affected though the modeller has confined his attention only to the chin and parts adjacent. You will perceive on the boundaries of the greenish yellow incrustation, that tubercles are visible in several points, which in this individual contained pus surrounding some of the hair follicles; in other portions of the diseased parts, pustules are visible, which are transfixed by one or more hairs whilst much hypertrophy of the integuments is every where existing, where the complaint has extended, the whole forming together a frightful mass, which obliged its unfortunate possessor to seek relief from many sources; several hospitals had been tried in vain. There was great heat and tension of the parts affected, the breath was offensive, the tongue white, the digestive functions deranged, and the bowels costive. He could give no reason for the origin of the disease, which commenced by a swelling beneath the nose, which was hot and painful, and after a short time became covered with small yellow pimples full of matter, which broke and adhered to the beard and formed the crusts you witnessed in the model; in a month or two, the whole hairy part of the face became affected, and the malady increased under whatever treatment was adopted, until his presentation here, when the model was taken, and a very frightful looking affair it is, yet not so much so as the reality. After this patient left the modeller's hands, the parts were steamed with the vapour of boiling water, to soften the crusts, and then washed with the yolk of an egg and tepid water, until the curved scissors could be used, so as to see what we were about. Several small ulcers, with fungoid looking granulations were thus discovered, and a crop of pustules exposed, transfixed by the hairs in the manner I have described; the forceps were used freely and a mildly stimulating ointment afterwards applied, composed as follows,—white precipitate of mercury gr. xv., strong mercurial oint. ʒj. Liquor of acetate of Lead ʒss., Recent, pure Palm oil ʒvj. This made a smooth cream-like application which suited the parts very well. To combat the general disorder, brisk acidulated saline purgatives were administered, which, when the desired effect was produced, were combined with a chalybeate, and he attended at the end of the first week so much ameliorated in every way, that he could scarcely believe in his good fortune. Of course the same means were continued, daily ablutions with the yolk of an egg and water, the daily use of the scissors and of the forceps being persisted in, and so he went on, until the end of September, scarcely a month from his first attendance, when I had the satisfaction of writing *cured* against his name, and I sent for him here to-day that his presence might verify what I have told you concerning him.

The next case I shall relate, is that of James Beasley aged 82, residing at Sidney Green, Islington, admitted 12 days ago, the model of whose disease is numbered from its place in the register, 6868. I introduced this patient to you last week, when had been few days only under treatment, and even then some improvement had taken place in his malady, which I believe was visible on comparing it with the cast taken on his admission. I bring him forward again to day, so that his continued and satisfactory improvement may be witnessed. This individual has suffered more or less for seven years, and having been informed by the druggists he consulted, that his complaint was incurable, consequently he had never sought regular medical aid, before his present application. I shall not describe the condition of this patient at length, as you have just had the opportunity of witnessing it, and it is represented on the cast suffice it therefore to say, that his disease did not differ materially from that of G. Richardson just mentioned, yet the complaint was less violent and extensive, though of much longer continuance, a fact evident enough, on comparison of the two models. An acidulated chalybeate was administered in a vegetable bitter to this patient, and he was purged with a daily dose of sulphate of magnesia; the external treatment was precisely the same as that already detailed in the former case, save that the black sulphuret of mercury was substituted for the white precipitate in the ointment, and from the marked improvement manifest, I think you will agree with me, he should continue the same plan of treatment, and to attend once a week. I will take a future occasion to let you observe his progress. I have now to beg your attention to an example of this disease, which I consider by far the most remarkable case of Sycosis which I have been so fortunate as to conduct to a favourable termination. It is that of *Gavin* [illegible]*t*, aged 45, a native of north Britain, who was admitted about two years ago, having suffered more than twenty years from inveterate Sycosis, which had resisted the efforts of the medical and surgical officers of most of the best hospitals in Edinburgh and London, which, as this individual had been well educated, he had sought, as probable sources for relief, selecting those only which had a kind of special reputation in these matters; had besides read and thought much on his disease, which had kept him in a degraded position, during so many years of his life, and occasioned his being shunned, and as it were banished from all society. In this severe case the Sycosis had extended to the forehead, and all the hairy parts of the face, and so much hypertrophy existed in many of the diseased parts, that the disfigurement was hideously great: the upper lip was quite lobulated, and a stiff yellow beard grew out of the surface covered with fungoid-looking granulations that oozed, a muco-purulent secretion. I had more leisure at that period than now falls to my share, and I spent many hours at different times in removing the hairs from this diseased mass, and in opening the tubercles when suppuration could be detected, anointing him with my own hands; in short, in carrying out the principles I have detailed. He took iron in various forms, but received the most marked benefit from the iodide internally administered, and iodide of sulphur externally, in the form of ointment (15 grains to the ounce of lard,) by which conjoined means in two or three months he was perfectly freed from his disease, save that a few of the eye-lashes seemed to have been permanently destroyed. This individual attended unasked and unexpected one of the early public meetings of the Committee of this Institution, and by a forcible, clearly expressed and acutely felt, detail of what he had suffered, and the benefit derived, contributed, perhaps more than any other single case, to fix an assurance of the usefulness of this undertaking in the minds of its earlier supporters. I have seen Scott on two or three occasions since he was well, in consequence of a slight reappearance, as he thought, of the Sycosis; but the extraction of a hair or two, and a return to his medicine and applications for a week or so, have always been sufficient to remove any inconvenience from which he may have suffered; and for the past eighteen months I have lost sight of him, so that I feel assured he has experienced no return of his twenty years malady. At the same time, let me repeat a caution, which cannot be expressed too often on my part, or recollected too tenaciously both, by patients suffering under cutaneous diseases, and by those who undertake the treatment of these troublesome maladies:—this is, that they are very liable to return, unless the greatest care and watchfulness be exercised by all parties concerned.

The few minutes that remain of the allotted time of our meeting may I think, be more profitably employed for those gentlemen, present, by inspecting the morbid appearances manifested by the hairs plucked from the vari of Sycosis, as displayed beneath the microscope by Mr. Topping; a more minute examination of the two patients in attendance, who are recovering from this loathsome disease, may also be gratifying. I shall, therefore conclude to-day, by announcing that the next lecture will be devoted to the united subject of rupia and ecthyma.

THE NATURE, CAUSES, AND TREATMENT OF MENTAL DISEASES.

By M. PINEL, M.D., Member of the Academy of Medicine, formerly Physician to the Bicêtre and Salpetrière Asylums, Author of the "Traité Medico-Philosophique sur l'Aliénation Mentale," "Medicine Clinique," "Nosographie Philosophique," &c., &c. Translated, with Notes, illustrative of some important Doctrines in Physiology, Phrenology, and Moral Education

By Dr. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopedia of Practical Surgery, &c.

CEREBRAL CONGESTION.

M. Andral thinks, as regards the entire encephalic system, that the grey substance is the chief seat of sanguineous congestions, and he admits that they occur under five different forms. In those of the first form the symptoms are slight; the great cerebral functions, intellect, sensibility, and mobility are undisturbed; but we have headache, vertigo, stupor, somnolency, sluggishness of the movements, or a vehement desire to be moving and active. This form of cerebral congestion gives rise to convulsive motions in the limbs. The pulse is full, tense, hard, and vibrating; the temporal arteries beat strongly, the face is flushed, and the heart palpitates, with suffocation, and swelling of the superficial veins. These symptoms may last but a short time, or be prolonged; they may recur from day to day, or at much more distant intervals, or they may terminate in cerebral hæmorrhage, or in some other serious affection of the brain.

In the second form, there is sudden and complete loss of consciousness: the patient falls heavily, the limbs are relaxed or stiff: this is the apoplectic congestion. The insane attacked with general paralysis, almost all die from this form of apoplexy. In the majority of cases this congestion is not fatal; the health is restored gradually, the intellect remaining feeble, the senses weakened, and the pronunciation embarrassed for some time. This general congestion, which when violent, possesses all the characters of cerebral hæmorrhage, is only distinguishable from it some time after the fit, by its being followed by a speedy termination.

The third form is characterized by hemiplegia; and what distinguishes this form of hemiplegia from that which results from cerebral hæmorrhage is, that it may disappear suddenly. But the hemiplegia may persist, although there be no cerebral hæmorrhage: the tongue may become paralysed suddenly, and convulsions often occur in this third form.

In the fourth form, lesions of the sensibility and mobility predominate, either separately or combined. A patient had several attacks of general paralysis every day for a month, lasting five or six minutes; he was cured by abundant blood-letting. A child, four years old, was subject from its infancy to momentary attacks of paralysis; if the attack came on while the child was standing, the lower extremities suddenly

bent, and he fell to the ground; if in bed, the whole of the muscles became relaxed, the sensibility blunted, and speech impossible. He died of another disease. The superior longitudinal sinus was found obliterated.

In the fifth form, the disturbance of the intellect is the most prominent symptom; then delirium is intense, the muscular powers acquire enormous energy, the congestion extends to the origin of the respiratory nerves, and the patient dies as it were from asphyxia, with a livid and purple aspect.

M. Andral, having described cerebral congestion under these forms, asks how it is that a disease whose anatomical characters are the same, should give rise to symptoms so different and so various. He thinks justly that this difference depends on the difference of the seat of the disease, although it is obvious that we are not able to fix from what part of the brain such symptoms arise. I believe, however, that some of the ideas already enounced may now contribute to a more easy solution of the question.

We have yet to determine the exact relations of the motory and sensitive fasciculi with each other, their limits of demarcation, connexion, and especially the relations between their nervous extremities, and the peripheric cortical substance. Explanations will then be more easy, and already it is something to know what we have to look for, and to be able to foresee a possible solution in questions of so much difficulty.

Sanguineous congestion, is clearly a primary condition in all cerebral affections: if it persist, it readily degenerates into irritation, or even into inflammation, and these two causes of disorganization give rise, either slowly or rapidly, to the most profound alterations of the cerebral pulp. We have already seen that simple congestion, produces the most marked disturbance of the sensibility and motility; in its fifth form we have furious delirium, and a high degree of nervous cerebritis, which in this case is nothing else than a diffuse hæmorrhage throughout the capillaries, and which produces death, by asphyxia, before it has time to become developed. Now whether it be on a large, or a small scale, we shall always meet with the same elements, and the same symptoms in almost all the affections of the encephalon.

II.

CEREBRAL INFLAMMATION.

Inflammation of the brain, may be confined to a hemisphere, or a portion of one, or of the gray or white substance; or it may, like congestion, occur in the different parts of the encephalon, in a nervous centre, or in a few convolutions only.

Wherever it may be seated, its anatomical characters are always the same; it begins by congestion, followed by slight tumefaction, with redness of the inflamed parts. The first effect of this inflammatory injection, is to augment the consistence of the nervous tissue, whether cortical or medullary, and then to cause a ramollissement; but in such a case the ramollissement, is always accompanied with some degree of injection, from which it has been named, ramollissement.

After the inflammation has lasted a sufficient time, traces of suppuration may be found, and this is always a sure sign of inflammation, excepting in a case of phlebitis where the pus usually occurs in the state of infiltration. The membranes almost always participate in the peripheric inflammation of the brain, it may even commence in the membranes, and the reciprocity is attested by the frequent sanguineous and serous congestions of the piamater and arachnoid.

Certain chronic affections of the brain may become a centre, around which inflammation of the nervous tissue may be developed. Thus we find encephalitis following the formation of a cyst after cerebral hæmorrhage. It has been observed that a large number of scrofulous children die of inflammation of the brain; this is now known to be the consequence of tubercles in the brain around which inflammation takes place.

Andral moreover considers the symptoms of cerebral inflammation in reference to disturbance of the intellect, to be a variable delirium in its form and intensity—this delirium may be furious, loquacious, or taciturn, it may be complicated with disorder of sensation, or motion; it varies in duration, and may be followed by a state of coma terminating in death. In other cases, the patient dies during the furious delirium The delirium and coma often alternate with each other. Have we not here the symptoms of furious mania? And what then is maniacal furor, but acute cerebritis at its commencement? In some cases the delirium is shown o[illegible] in the beginning, in others it com[illegible]on later. It may continue after the inflamm[illegible]on, and it is not rare to find *mental alienation* succeeding encephalitis, or terminating in enfeeblement of the intellect, or of one of its faculties, the memory for instance; and the acute cerebritis passing into a state of indolence and chronicity and giving rise to symptoms on which we bestow the name of chronic mania or demency. On this point, the name is of no importance, but the physical cause in our estimation is every thing.

The lesions of motion and sensation are no less remarkable in acute cerebritis than are violent agitation, subsultus of the tendons, convulsions, contraction, and paralysis. The convulsions affect only certain muscles of the eyes the tongue and limbs: the paralysis extends successively to the face, tongue, limbs, to the muscles of the pharynx, larynx, bladder and rectum; it is usually preceded by convulsions and contractions which may alternate, or succeed each other in the limbs.

As to the lesions of sensibility, they are shewn in cephalalgia, illusions of the senses, and general or partial exaltation; sometimes by abolition general or partial, or by an exquisite sensitiveness of [illegible]t or hearing.

If i[illegible] beginning, or almost throughout the entire progress of mental alienations, we observe any other than these symptoms, we shall be forced to admit that their organic causes must be different; but as this sketch corresponds closely with its principal phenomena, we must not hesitate to acknowledge it, and to seek by deep study of their physical causes, correct notions on the seat and nature of the disease.

III.

CEREBRAL RAMOLLISSEMENT.

Softening is characterized in the dead body by a softish, pulpy, state of the nervous substance; sometimes instead of the nervous substance, we find only a liquid matter in which shreds of white and grey matter held in cellulo-vascular tissue, are floating. In other cases of softening, the grey substance both peripheric and central is often discoloured. The local and partial ramollissement is the most common; it has been found chiefly in the convolutions, optic tracts, corpora striata, cornua ammonis, corpora callosa, septum lucidum, or disseminated in several points.

Lesions of the intellect coincide mostly with softening of the cortical substance of the convolutions. Rostan who was the first to notice this pathological decomposition, has observed the intellectual powers equally disturbed in a case where the softening occurred at the base of the posterior lobe of the brain.

Softening has been found at all periods of life, in infancy, and in adult and old age; it shews itself frequently in autumn in the infirmaries of the salpetriere. In its progress, as well as in its anatomical characters, it exhibits the effects and traces of the general debility of old age, and here it is more a senile decomposition than a result of inflammation; and this is the character amongst those old people, of almost every inflammation; in them pneumonia is latent, without cough, pain, or sputa, erysipelas of the skin indolent, and requiring stimulants to make it progress. The cerebral softening is in the same condition; it is asthenic and has not strength enough to be inflammatory.

Paralysis is one of its most constant effects; it comes on gradually or suddenly; it begins by prickings, and odd sensations in the fingers and arms, and then assumes the character of a sudden apoplectic seizure. When the patient is first seen in this state, the diagnosis is uncertain; we have to wait a day or two, in order to ascertain, whether the case is one of cerebral hemorrhage, or softening. In hemorrhage, unless the outburst be very great, there is always some slight amendment next day; but in the softening which first shews itself in this manner, the symptoms become more and more aggravated, and the symptoms affecting motion and sensation are those which demand our most attentive examination.

The lesions of sensibility are marked by fixed pains in the head, sometimes at the point of disease, sometimes in the opposite point; these pains may be fixed, erratic, permanent, intolerable, sometimes intermittent, and often take the lead of all the other symptoms. As in other diseases of the brain, the sensibility may be extinct, or exalted, which is more uncommon; the senses are almost always more or less affected.

The following are the various forms under which cerebral softening may occur. 1st. Sudden loss of consciousness with simple paralysis; 2nd. Sudden loss of consciousness with contraction; 3rd. Sudden loss of consciousness with convulsions, partial or general; 4th. Consciousness intact, intellect somewhat obtuse, sudden alteration of motility; 5th. Consciousness intact, motility becoming altered only slowly; 6th. Softening, no longer revealing itself by the usual symptoms; and finally softening without any symptoms.

Induration is more rare than softening of the brain; it is the result either of an organic process which, in the fœtal state, has disorganized the brain, or in the adult age, of a chronic affection of the medullary substance. We related several cases of it in speaking of cerebral hypertrophy in paralytics in the state of demency. We find it pretty frequently associated with atrophy of one lobe in idiots and epileptics, whose extremities are distorted on one side of the body. I have mentioned several cases of this under the head of idiotcy.

Cerebral induration always affects deeply the intellect, motility, and sensibility; its most common symptoms are idiotcy, epilepsy, contraction, distortion of the limbs, tic of the face, a jumping instead of a walking gait, paralysis, and complete insensibility. The hypertrophic induration that we have met with in persons attacked with general paralysis, has exhibited all the symptoms of acute or chronic inflammation.

It may affect an entire lobe, or both lobes at the same time, or it may be confined to some particular nervous centre, such as the optic tract, the cornua ammonis, the pons, bulb, corpora olivaria, and in the cerebellum, to one of the lobes, or to the middle lobe. I once found it affecting the posterior part of the two lobes of the cerebellum.

IV.

CEREBRAL HEMORRHAGE.

We have seen that violent congestion presents the principal symptoms of hemorrhage, sudden loss of consciousness, paralysis in all its varieties, coma, and death; in the case of congestion we named diffused hemorrhage through all the cerebral capillaries. We now observe this congestion making an eruption into the interior of the nervous substance, and forming a focus of blood, giving rise to a morbid action, in itself constituting a fresh disease.

In closely observing the fugitive and remote symptoms that precede hemorrhage, it is impossible not to admit the existence of a preparatory process in the nervous tissue itself; there is sluggishness of mind, a tendency to sleep, fatigue, and general depression that to me seem quite characteristic. In other cases, the symptoms are the reverse of these, viz.: general excitement, desire of being in motion, and intellectual superactivity, all these symptoms denoting sufficiently that there is already a diseased focus in the brain. The hemorrhage has also been attributed to the tenuity of the arterial walls, which have no cellular coat in the brain. This second reason is very admissible in corroboration of the first.

The hemorrhage may occur in various parts of

the brain, its most usual seat being the optic tracts, the corpora striata, and the parts of the hemispheres that are on the same level with them. The corpus striatum is traversed throughout its entire length by an artery of some size, giving rise to numerous branches which may readily afford source to a hemorrhagic eruption. The hemorrhage may leave the corpus striatum untouched, unfiltrating the parts of the cerebral lobes external to it; in adults it is frequent in the convolutions. It has been thought that in old people the hemorrhage may be veinous, owing to the facility with which the veins become dilated.

When it takes place in the ventricles, it results most frequently from a rent in the neighbouring parts; after the hemispheres it occurs most frequently in the pons varolii, it is rarely met with in the cerebellum.

The blood focus is of various sizes, from that of a pea, or nut, to a large cavern in the middle of the cerebral lobes; it may occupy but one focus, or be disseminated into several small ones. The blood has not the same appearance at different periods of the disease; being at first liquid and dark, it soon assumes the consistence of currant jelly, then gradually becomes brown and more solid, until by the progress of reabsorption, nothing is left but a sort of calcareous residue with cellular bands. The blood may proceed from the rupture of a large vessel, or from exhalation from the capillaries without the appearance of laceration of any considerable vessel. When the hemorrhage does not prove fatal, the work of reabsorption is soon set up; a cellular cyst is formed, enveloping the blood. This cyst exhales serum, which mixes with it, dividing it into small clots, and thus favouring reabsorption; the blood by little and little disappears, and nothing is left at last but a little serum, a small citron coloured kernel surrounded with bands and vessels. Such is the first phenomenon leading to the cure of cerebral hemorrhage. But the organic process does not stop here, but it continues after the blood is reabsorbed, until the cyst itself is gradually removed, and nothing is left but a white cicatrix. Sometimes in the place of the cyst, a reddish white mass is found, traversed by veins, and appearing to be a tissue of accidental formation; this substance of a spongy nature is found in persons who have remained hemiplegic.

The work of reabsorption varies with the activity, age, and vigour of the individual; but it will in general take five or six months before the cicatrisation is completed; the cerebral substance, however is not reproduced, as has been asserted, the union of the parts is effected by means of accidental tissue.

It is important to examine the state of the blood-vessels: they are often studded with steatomatous, cartilaginous, or osseous patches, and these alterations, are undoubtedly one of the most frequent causes of their rupture in the aged; they are sometimes also remarkably friable. Lacerations have been found in the plexus choroides, in the basilar artery, the communicans of Willis, on the arteries of the cerebellum, and on the surface of the brain.

The hemorrhagic focus often presents no trace of nervous matter, amd it is only found surrounding the clot, torn, crushed, or reduced to a reddish pulp, and in its room, the cellulo-vascular substance clearly dissected. Doubtless this state of softening had preceded the hemorrhage, as the precursory symptoms indicated, and in confirmation, we find in some cases softening, red points shewing the orifices of vessels, as well as red spots of larger size, which are small effusions, as well as effusions in considerable quantity.

The nervous pulp surrounding the hemorrhagic focus is always of a clear or dark yellow, or violet; and this change of colour doubtless depends on imbibition. Its consistence may not be changed, although the imbibition must be considered as a frequent cause of the softening that takes place after hemorrhage.

Besides the central hemorrhage, the whole brain shows a general congestion, sanguineous turgescence in the encephalic mass, and great engorgement in the sinuses and other vessels. The turgescence is greatest at the early stage of the hemorrhage, and it is only when it begins to abate that the symptoms begin to show amendment, especially in the intellectual functions. The rest of the mass of the brain may be influenced in another manner. Thus, the blood often bursting through the septum lucidum, passes into the other ventricle, compressing the healthy hemisphere, and stopping its functions; and as the apoplectic symptoms depend as much on the congestions, and consequent compression, as on the hemorrhage itself, these facts should be taken into consideration.

The symptoms of cerebral hemorrhage may be distinguished into the precursory, such as stupor passing congestion, and depression; those arising from the effusion of blood itself, from compression and laceration of the brain; and those which arise from complications, such as softening, inflammation, congestion, or other lesions consequent upon the hemorrhage.

Paralysis is a constant symptom, and when it comes on suddenly, or persists for a long time it is a characteristic symptom; it only diminishes and disappears with the progress of absorption evacuations of blood favour the amelioration of the symptoms. The paralysis is greatest at the moment when the effusion takes place, and may become aggravated, if a fresh hemorrhage be added to the first. The commencement of the paralysis is almost always announced by weakness, slight numbness or a sense of weight in the limbs; the patient is observed to let what he may be holding in his hand drop, or to stumble at the slighest obstacle. I remember the case of a person, who was only sensible to the impression of cold of the night vase on one side; a week after this, he had an attack of cerebral hemorrhage.

Paralysis, a functional symptom, which according to Andral of itself indicates a hemorrhage, not only varies in intensity, but in the symptoms it presents according to the difference of its seat. In the brain, the paralysis affects the whole body the limbs, and is general when the hemorrhage extends to both lobes at once, or is so considerable as to burst into the opposite lobe, and compress it. In such a case, if we raise the limbs they fall again like inert masses. The most common paralysis is hemiplegia, occurring suddenly and persisting; it may affect the whole side, or what is more frequent, one limb of that side; a corresponding paralysis of the face is then observed, the mouth being drawn to the unparalyzed side, thro' the want of antagonism in the muscles of the affected side.

Hemiplegia always attacks (and a few exceptions cannot invalidate this rule) the side opposite to that on which the effusion takes place. The tongue too may only be paralysed on one side, and when the patient thrusts it out, it turns it to one side, the deviation does not always take place on the same side; it usually turns to the paralysed side, altho' it is sometimes observed to turn to the opposite side. These differences no doubt depend on the extent and sort of disease in the centres from which such a number of nerves are distributed to the muscles of the tongue.

The fact of crossing paralysis, may however be taken as a general law, in cerebral hemorrhage, and anatomy explains it by the crossing of the fibres of the upper part of the medulla oblongata. Some cases have been related, which seem to establish the probability of a direct paralysis on the diseased side. But may they not be the result of anomaly of structure? May there not be sometimes juxtaposition, instead of crossing of the fasciculi in some cases, as we have now and then, displacement of the heart?

The hemiplegia may be more intense in the upper than the lower limb. Some writers have thought that the hemiplegia was complete only when the hemorrhage occurred in the middle lobe of the opposite side—that the lower limb was only paralysed when it occurred in the corpus striatum—and that it was confined to the arm when it occurred in the optic tract. I have myself most commonly met with paralyses of the upper limb coinciding with alterations of the posterior lobe. But the more we examine the more we become satisfied of the impossibility of attaching paralytic symptoms to lesions in any given seat, as the structure and nervous susceptibility of each individual, the extent and relations of the lesion with the surrounding parts, produce, in paralytic symptoms, combinations so various, that we must confine ourselves to general results.

When a hemorrhage occurs in the convolutions, it may also give rise to paralysis. I have no doubt in the case mentioned by myself, that the alteration, although situated in the upper part of the brain, interested the extremity of some nervous fibre of the fasciculi, arising from the medulla.

It has been stated that when the hemorrhage occurs in the mesocephalon, the symptoms of the paralysis are general; but the facts shew that very often in this case the symptoms are those of hemiplegia only; when it occurs in the cerebellum, still the symptoms of paralysis are oftener crossed than direct, and they are direct only when the hemorrhage occurs in the spinal marrow.

In the muscles of the face the paralysis is observed always on the same side as the paralysis of the limbs, only from the want of antagonism, the mouth is drawn to the opposite side.

Once the paralysis is produced, it may last a long time, giving rise in the affected limb to a diminution of its nutrition, and consequently atrophy. It may remain stationary for years. When it has a tendency to disappear, the amendment proceeds gradually: the cheeks, lips, tongue and limbs successively recover their motility; but the lower limbs remain weak for a long time.

The lesions of sensibility that most commonly precede cerebral hemorrhage are coldness of the limbs, numbness, and certain prickings in the skin of the fingers; these sensations are usually felt in the limb that will be paralysed although they may occur generally. When the sensibility is abolished at the same time as the motility in a limb, and the disease tends to a cure, the sensibility is almost always restored before the power of motion. The disturbance to which these lesions give rise before the attack is greatest in the organs of the senses, some think they see flies before their eyes, or a fog or small atoms floating about, or the natural objects coloured red, black, or green. Some see double, and this affection with some is transient, while with others it is permanent, and in some cases, the sight becomes unusally powerful.

The sight may be lost on both sides or only on one, and in this case, the alteration must occur on a level with the commissure of the optic tracts; the upper part of the tracts might be affected without causing blindness. But the blindness often occurs in the case of an effusion which occurs at a distance from the optic tracts, as for instance, in the cerebellum. The dilatation or contraction of the pupils depends also on the same lesions.

Lesions of the intellect are shown before the attack by sluggishness, and remarkable inaptitude of the mind, a continual tendency to repose, and drowsiness, and by momentary failures of the memory. After the attack, it is always more or less disturbed; but the patients are very anxious to conceal their feelings, unless the attack is very considerable. The intellectual operations are also disturbed, when the hemorrhage occurs in the cerebellum and mesocephalon, whether it be, that these organs, take share in the acts of the intellect, or that their diseases affect them secondarily.

Throughout the cerebro-spinal axis, there prevails a general consent, by virtue of which, the derangement of one point produces secondary disturbance in the other parts; in this manner, a small circumscribed hemorrhage occurring in the anterior pyramidalia has been known to abolish the intellectual functions completely.

In cerebral hemorrhage, the other lesions of the intelligence deserve to be carefully studied.

When the effusion is small, the patient is soon aroused and recovers his faculties. Scientific and learned men resume their wonted [illegible] with fresh ardour, but can no longer discover in their productions the vigour of thought and [illegible] of imagination, by which they had been distinguished long before, by a gradual [illegible], and an inability to sustain an ardu[illegible] for any time. The last productions of celebrated men arrived at old age, bear the stamp of this decay, which at the same time excites respect and pain. Successive attacks of hemorrhage lead to a state of childishness and imbecility, which puts an end to all his habitual relations, making him laugh, or cry without motive, and giving rise to momentary bursts of demented furor, sometimes a febrile delirium supervenes, depending generally on some complication of encephalitis.

The most curious lesions of the intellect are those that occur singly, such as the loss of speech, or of memory, or even the partial loss of one of these faculties. Speech may be affected partially or completely, the patient being unable to articulate certain words, or letters. The tongue being but an instrument, and articulation being only a result of the associated action of the other muscles of the mouth, pharynx and larynx, we can only rationally attribute the lesions of speech to the nervous centre from which the nerves moving these muscles arise, and this centre is the corpus olivare.

There may also be partial lesions of the memory from an attack of haemorrhage even when the rest of the intellectual functions appear intact. Some hemiplegic patients resume the management of their affairs with perfect lucidity, but they cannot remember proper names, substantives, adjectives, numbers, and these partial losses of memory, which however shew that there still a morbid process going on in the brain, may be independent of any other lesion of the intellect.

There is a particular symptom which I have often observed in old hemiplegic patients reduced to demency viz, a strong disposition to masturbation. It may be that the hemorrhagic focus becomes a cause of excitation to the nervous fasciculi, exerting an influence on the genital organs, and especially on those of the cervical portion of the spinal marrow.

In other patients we observe other phenomena, no less singular. Some are impelled to move constantly forward. There is a hemiplegic patient at Bicetre, who can only stop himself by placing himself against the wall. Some, after advancing two or three paces, make suddenly five or six backwards, as if they were forced by a spring. I am acquainted with a hemiplegic patient, who has partially recovered mobility, and who, when he has advanced about fifty paces, describes, in spite of himself, two or three circles running, and then begins to walk gently again. In some we observe an inclination to turn, to *pirouette*. All these varieties of lesion depend on the nervous centres being affected, such as the corpora striata, and the crura of the cerebellum.

ORIGINAL CONTRIBUTIONS.

CASE OF COLLAPSE FROM EXPOSURE AFTER EXCESSIVE DRINKING.—DEATH.

By John Alexander Morris, Esq., Surgeon.

On the 29th of June at 9 o'clock, a.m., A. B was brought to me presenting the following appearances. Profound insensibility, deep and difficult stertor, yet unaccompanied by any apparent movement of the ribs or respiratory muscles; entire body perfectly cold, and rigid as marble; skin dry and insensible to the touch; tongue slightly protruding, slight foaming from the mouth, lips cold and of a purplish hue; jaws nearly but firmly locked; eyelids closed; pupils insensible to light. The continued application of the vapor of the Aqua Ammon. Fort. for about five minutes produced no sensible effect, with the exception of a slight but momentary modification of the breathing in the form of an attempt at a deeper inspiration. Action of heart, carotid, and temporal arteries imperceptible. I learnt from the [illegible] that the patient was brought on a [illegible] that he [illegible] addicted, at long and [illegible] intervals, to drinking to excess; whenever his [illegible] or opportunities permitted, he could indulge [illegible] largely without inducing intoxication; that on the preceding evening both had been drinking until the patient not being able to stand was compelled to lie by the side of a ditch on the highway, where he was suffered to remain by his companion, who went home under the asserted opinion that probably he might return to his senses and take care of himself; on proceeding, however, to the spot on the following morning he discovered him in nearly the exact posture in which he was left; he had therefore remained exposed to the night air during eleven hours, at the expiration of which he was found in the state I have just described.

The man evinced no symptom from which I could augur a favorable result, and I feared lest dissolution might take place before sufficiently active measures could be put into operation; I directed, therefore, that he should be vigorously rubbed over the region of the heart and abdomen with strong Aqua Ammon. a bottle of which was also kept applied to his nostrils; the bladder was emptied and from the quantity of water drawn off seemed to have been in a state of considerable distension. No appearance of resuscitation whatever succeeded these measures, although persevered in without intermission for about three quarters of an hour, the pulse however, and the action of the heart became perceptible. Under these circumstances, I got him immediately stripped and placed in bed, supported by an attendant in an upright position, his legs immersed up to the knees in a bucket of water of about 100° into which were thrown four handfuls of common salt; each hand to above the wrist was also subjected to the same treatment, the temperature of the water in which they were immersed being considerably under that in the bucket. I was surprised to observe that the heat seemed to act more sensibly on the hands than it did on the feet as was evinced by his making efforts to remove them; the body during this process was well wrapped in blankets. Immediately on the immersion of the feet I observed a diminution of the circumference of the neck gradually but perceptibly take place, and the head become more flexible on the shoulders. I now attempted to induce vomiting, by tickling the throat and fauces, for the purpose of aiding in rousing the oppressed powers of the system; a scanty quantity of thick mucus was the only result. After the lapse of a little time I injected into the stomach a solution of four grains of Tartar Emetic and followed it with a copious supply of warm water, until the stomach, being completely charged, was forced to reject it. The effort thus caused was succeeded by easier respiration which now lost its peculiar laryngeal character; the jaws became a little more relaxed and the tongue somewhat receded. The hair was now cut off and cold applied to the head; six leeches to the temples and dry cupping to the nape of the neck. The water in which the feet had now remained for nearly an hour, was removed and replaced by water of a considerably higher temperature. The hands were similarly treated, and about half an ounce of hartshorn largely diluted with cold water was injected into the stomach; vomiting was shortly after induced and the stomach again charged with cold water and hartshorn, which was immediately after succeeded by the affusion on the vertex of the head of a gallon of cold water, allowed to pour from the spout of a kettle at a height of three feet in an uninterrupted stream; not the slightest evidence of returning sensation followed these continued and energetic measures and I began to give up all hope of saving him. Soon after the cold affusion, however, and about half an hour after the renewal of the water, I could distinguish slight mobility of the pupils, the jaws were relaxed, the breathing again assumed its stertorous character, and the ribs and respiratory muscles their legitimate functions, after a long cessation; the face became more developed, and the whole body was in a few seconds bathed in profuse perspiration, his shirt was completely saturated with it, and it flowed in innumerable currents over the entire surface of his body; he was now well dried and the feet and hands removed from the hot water; the former were well blistered. He was laid in bed with the head slightly reclining backwards, and the shoulders elevated as being the most convenient posture for easy respiration. In the course of a few minutes copious vomiting ensued which was encouraged. This subsiding without any amendment whatever taking place, I, as a last resource made a quart of the strongest infusion of black tea which, with about three drachms of spirit of hartshorn in a pint of cold water, I threw into the stomach, and left him at 2 o'clock, p.m. having remained with him five hours. I calculated on the occurrence of dissolution early the following morning, and thought no more of the matter until 5 o'clock in the evening when I received a message from the nurse in attendance that he had returned to a state of almost perfect consciousness. I immediately visited him and found him to my great astonishment sitting up in the act of drinking copiously; his face was red, eyes injected, speech quite consistent but enunciated with slight difficulty; his manner and appearance were those of one waking from a drunken fit yet not quite free from its effects, his pulse was strong, full, and regular. These appearances began to manifest themselves immediately after my departure. After giving directions respecting the applications to be made to the blistered legs I left him, cautioning the nurse to watch him narrowly, and despatch a messenger to me the moment the least appearance of collapse should set in, and to administer nothing with the exception of cold water or cold whey. Between 11 and 12 o'clock of the same night I received a message that he was dying, I went immediately and within ten minutes after my arrival he died. From what I could learn of his history after I left him at 5 o'clock, it appeared, that immediately after my departure his pulse began to waver and his manner to look suspicious. These symptoms continued progressively assuming a more decidedly threatening aspect until 11 o'clock, when, no symptom remaining from which to augur favourably, I was summoned to witness his dissolution. On *post mortem* examination sixteen hours after death the brain was found loaded with blood, an appearance which may partly be accounted for by its having gravitated to that organ during its depending position after death. The ventricles and lateral sinuses contained a small quantity of serum; no other abnormal appearance presented itself. The stomach and intestines were simply vascular, but the liver was perfectly healthy. The man was strong, of a well developed muscular system, and evidently of a robust constitution. I regard the cause of his death to be collapse succeeding a high and long-continued excitement. The case I conceive to be rare and interesting as evincing the necessity of unremitting vigilance, and the prosecution of a system of careful but bold stimulation. I should have observed that no spirituous smell could at any time be perceived by me, although I sought for it during his life as well as at the *post mortem* examination. Some of the attendants however assured me that to their senses it was quite perceptible when he was first submitted to treatment. The measures employed to effect resuscitation were very powerful but justifiably so, as it seemed a matter of extreme improbability, if not impossibility, considering his state when I first saw him that he could otherwise have been made to evince even the temporary return to consciousness which took place.

M. Melays, Doctor of Medicine chief of the Anatomical division of the school of Medicine of Rouen has been appointed by ministerial *ordonnance* professor at the school, in place of M. A. Flaubert.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

Reported by J. T. Griffith, Esq., M.R.C.S., late House Surgeon.

DISLOCATION OF THE FEMUR INTO THE ISCHIATIC NOTCH.

Maurice Coghlan, aged 60, an Irish bricklayer, was brought into University College Hospital on the 11th of June, 1845, quite dead, having fallen above 30 feet from a ladder, up which he had been carrying a pail of water. On making an external examination of the body, there was found to be a fracture of the skull, with depression; two or three ribs were found to be fractured on the right side, and the right femur to be dislocated into the ischiatic foramen, with all the characteristic signs of such an accident. The foot was turned considerably inwards—the great toe pointing to the opposite instep. There was seen an apparent shortening of the limb, the right knee being nearly three inches above the left. On measuring, however, this was found to arise from the pelvis on that side being much higher than on the other, no perceptible difference existing on the two sides in the distance between the anterior superior spinous process of the ilium and the external malleolus. External rotation of the injured limb was impossible to any extent, but the thigh could be readily flexed upon the trunk.

On dissecting the gluteal region, a considerable quantity of extravasated blood was perceived among the fibres of the gluteus maximus muscle and under the integuments of the back part of the crest of the ilium, which portion was broken off, and entirely separated from the body of the bone along its whole length. The gluteus maximus muscle was large, and fully developed; it was uninjured, and on raising it from its attachments, the head of the femur was seen completely exposed beneath it, lying over the sciatic foramen, just below the inferior border of the pyriformis muscle, and in contact with the sciatic artery. The great sciatic nerve was stretched tightly over the neck of the bone, and appeared to have burst through the fibres, and got in front of the quadratus femoris muscle, which was completely torn across, as was also the tendon of the obturator externus; indeed the head of the femur appeared as though it had burst through between that muscle and the other external rotators of the thigh, for the gemelli and the obturator internus remained attached to their insertions in the trochanteric fossa; the pyriformis, too, was entire, and as it lay directly above the head of the femur, it did not appear to have undergone much tension. The gluteus medius, at its upper and posterior part, was quite torn from the bone, which was fractured beneath it. The small sci[illegible] nerve was seen beneath the head of the fem[illegible] and a quantity of extravasated blood was found in that neighbourhood; there was also a great deal of blood near the small trochanter, but the tendon of the psoas and iliacus did not appear to have been injured. The ligamentum teres was torn out of the fossa in the head of the femur, but remained attached to the acetabulum. On examining the capsular ligament, it was discovered to have been ruptured at its posterior part only.

The fracture of the skull was found to extend completely across the base, rupturing the internal carotids of both sides during their course through the cavernous sinuses.

GLASGOW ROYAL INFIRMARY.

Reported by WALTER BAIN, ESQ.

COMPOUND FRACTURE OF THE FEMUR—DEATH.

John Orr, aged thirteen, was admitted into the Royal Glasgow Infirmary, under the care of Dr. Hannay, August 2nd, 1845, at four, p.m.

At seven o'clock in the morning he was caught by some part of his dress, upon a revolving shaft in the factory in which he worked, and drawn round along with it several times, his limbs and head coming in contact with some barrels standing near the machinery.

On admission, his right lower extremity was three inches shorter than the left, the foot was everted, and the thigh much distorted there was no pulsation in the popliteal artery or in the vessels of foot.

The right femur is fractured transversely at its middle third: the fractured extremities overlap each other very much, and the lower fragment approaches very close to the integument posteriorly.

The anterior portion seems pressing on the femoral artery, as it is tucked forwards. When the limb is reduced pulsation is restored to the anterior tibial. Over the fracture, and exactly in the mesial line of the thigh posteriorly, is a small wound, large enough to admit a probe, and leading into a large bloody cyst.

Much pain is complained of across the lower part of the chest and upper part of the abdomen. No ribs fractured. Had no vomiting, and passes urine freely and without difficulty.

His face is much swollen and discoloured Both palpebræ infiltrated with blood. There is a small ecchymosed spot on the forehead over the external angular process of the frontal bone, conveying to the finger a feeling as if of a ridge with a portion of bone depressed; but on minute examination, no fracture can be detected Much abrasion of the integuments over and below the chin, and in the mouth about an inch of mucous membrane is torn from the jaw at the roots of the lower incisor teeth, and on the mucous surface of the lower lip is a deep, contused wound, large enough to hold a bean

Has no headache. Pupils are natural. Tongue clean. Pulse 80.

The limb was put up with lateral splints, and hot fomentations applied.

3rd. Patient has passed a restless night. Pulse 108, feeble. He complains much of bruised parts. Urine copious. Ordinary diet.

Contin. fotus. Hab. hor. somni. Pulv. Doveri gr. xii.

5th Swelling of face abated; chin and lower lip painful, swollen, and tense, complains considerably of chest; sound on percussion, and respiratory sounds natural; limb is easy and easily kept in proper position; swelling abating, skin warm; pulse 112; tongue clean; bowels regular.

℞ Sp æth. nitros. ʒij., Vin tart. antim ʒi. potus imperial. lbj. Sumat in dies part. vicib.

7th. Copious discharge of a thin, dark-red fluid from the wound; limb easy, chest less complained of; skin still hot and dry; tongue slightly loaded; bowels natural; pulse 96, of good strength.

Contr. potus. Foment limb as formerly.

9th. Had a short rigor last evening, and a restless and feverish night. The limb is in a tolerable position, but there is much thin, unhealthy discharge from the wound Pulse 96, small, and easily compressed, thirst, but no appetite, bowels natural.

Hab. in dies vin. rubri, ℥iv: Hor. somni hab. haust. c. tr. opii, m. xii.

10th. The draught soothed him, and procured a good night's rest. Pulse 96; improved in strength. Discharge from the wound very abundant, but of better character; no return of rigor; uneasiness in the chest gone; mouth healing; skin moist; tongue clean; less thirst; bowels rather sluggish.

To have beef-tea and arrowroot.

11th. The probe reaches bare bone by the wound; a large abscess in the back part of the thigh; discharge is improved in character, and its free escape is procured by slinging the leg and leaving the opening patent. Is at present quite free from pain, and inclined to sleep.

Augeat. vin. ad ℥vi.

12th. An uneasy and sleepless night from pain in the limb; some return of febrile symptoms; bowels confined.

Hab. stat. pulv. jalap. c., ʒss; et enema commune post hor. ij. Contr. mistur. et vin.

13th. Discharge less and improved in quality; bones easily kept in position by lateral splints. Scultetus' bandage, and fomentations. The limb still continues slung, the opening of the abscess looking directly downwards; febrile symptoms diminished; some appetite.

Contr.

15th. Constitutional symptoms moderate; discharge diminished still more and improved in quality. Relishes wine.

Augeat. vin. ad. ℥vij.

18th. Still slight febrile symptoms; appetite improved. Desault's splint to-day applied; limb laid on a cushion, with an aperture to allow of escape of pus from abscess, which is more healthy. Collection of matter formed in the mouth, discharging itself by the side of some denuded bone.

Contr.

29th. Has remained pretty well since last report till to-day, when he had a severe rigor, anorexia, and vomiting, followed by febrile symptoms and profuse sweating.

Contr. omnia.

30th. The upper fragment of the femur is much tilted forwards; the limb to-day was bent on pelvis, and laid on outer side on a concave splint (the only position which will permit the free exit of pus).

31st. Passed a restless night; much distressed with general irritation, and complains of that part of his hip which rests on bed; febrile symptoms continue, with dry tongue and hot skin.

℞ Aq. acet. ammon. ℥ij., Vin. antimon. Tr opii, aa. ʒss.; Aq pura, ℥iij. Sumat ℥j. tertia q. q. hora. Bibat imperial.

Sept. 1. Febrile state continues; complains much.

Contr.

4th. Restless and almost pulseless; countenance pale and sharp; low muttering; takes no food or wine.

Hab. sp. hordei, ℥ij., c. aq. bullient. et sacchar.

5th Moribund.

6th Died this morning.

The parents would not permit an inspection of the body.

PHLEGMONOUS ERYSIPELAS OF LEG AND FOOT, TREATED BY INCISIONS AND FOMENTATIONS CONTAINING A SOLUTION OF SULPHATE OF IRON. RECOVERY.

John Kennedy, aged twenty-six, an Irish policeman, married, was admitted July 30, 1845, under the care of Dr. Hannay.

Patient is a stout, muscular man, of temperate habits, but much exposed from his occupation to vicissitudes of weather.

Seven days [illegible], after exposure to wet and cold, and, at th[illegible] time, great fatigue, he had severe rigor[illegible]ed by headache, acute pain in left foot and [illegible] heat of skin, thirst, and loss of appetite Shortly after the foot was observed to become swollen and red. Fomentations and poultices were applied, but without relief.

At present the left foot and leg are swollen, œdematous, red, and acutely painful, especially across the instep, where the integument is tense and glossy. At this point there is distinct fluctuation, and the surrounding parts have a boggy feel.

The pain deprives the patient of sleep; skin hot and dry; pulse ninety-six, full and bounding; tongue clean and moist; bowels costive.

Incisions over left leg and foot Low diet.

℞ Aq. acetat. ammon. ℥ij., Vin. antimon., Tr. opii. aa. ʒj., Aq. puræ ℥iij. Sumat ℥j tertia q.q. hora.

31st. Patient expressed himself very much relieved by the incisions, which have bled copiously. The redness and swelling have considerably abated; has had a good night; skin still warm but moist; less thirst; tongue clean, bowels opened; pulse 80.

Contr. mistur.

℞ Sulphat ferri ʒij., Aq. puræ ℥vj, Ft. sol. Admov. p.d. et crur. lintea madef. in hac solut.

August 1. Pain, swelling, and redness remarkably abated; discharge from incisions pretty copious, but healthy; pulse, tongue, skin, and countenance now natural; appetite returning.

Contr. solut. et mistur.

4th. Some increase to-day of pain about three inches above the ancle; the part is tense and shining, and fluctuation is evident. Foot quite easy; swelling nearly gone; discharge scanty

and healthy; incisions granulating; skin natural; pulse 80, full; bowels costive.

Aperiat. abscess.

Contr. solut. et mistur.

Sumat stat. ol. ricini ℥j.

5th. The patient was much relieved by the exit of a considerable quantity of pus, by incision yesterday: swelling nearly gone; tension abated; bowels freely moved by the castor oil; has perspired freely; pulse 74.

Cont. omnia, bibat imperial.

6th. Febrile symptoms gone; takes his food well.

Omittr. omnia,

℞ Sulph. ferri ℥j., Aq. bullient. lbj. Sit pro lotione, quocum madd. sit fasc. scultetus et ped. et cruri applicand.

To have ordinary diet.

9th. The limb is perfectly easy; and the swelling is gone; incisions alone remain to be healed.

Curat. ulc. c. emplastr. adhesiv. et fasc.

10th. The incisions are healed to a point; he has been walking about for a few days; is free from pain and every inconvenience, save some stiffness; general health perfect, though he is considerably less stout than when he was admitted.

Dismissed cured.

CHRONIC ECZEMA. CURE.

George Sutherland, aged 34, a scotch stone-mason, single, was admitted under Dr. Watson, February 25th, 1845.

Over several parts of the surface is an eruption which is said to have commenced about 2 months ago on the arms and to have spread thence over the greater part of the body in 4 or 5 days.

At present the skin of the arm pits, over the flexures of the knees and elbows, of the scrotum and penis and immediately contiguous parts, is red, excoriated and discharging a considerable quantity of a clear fluid.

Around the margins of the red excoriated parts are some thin greenish crusts. Over the abdomen and inner aspect of the thighs are a number of small acuminated milky vesicles surrounded by a red areola and in most instances with a hair in their centres, also numerous small ulcers covered with brownish scabs.

The neck and arms are affected in a similar manner but to a very slight extent; ears and face are scaly and were affected before admission; feet, hands and back are quite free from disease. The affected parts have repeatedly desquamated and there have been several successi[illegible]rops of vesicles. He has constant severe pain and [illegible]tly excessive itching in the diseased skin. [illegible]

Eight months ago he had sy[illegible] for which he took mercury to the extent of affecting his mouth; his general health is said to have been very good. Appetite good; tongue white; bowels regular. Pulse 90.

26th. Fiat venesect. ad ℥xij. Sumat in die, tart. antimon. gr. iij. Aq. puræ ℥vi. ℞. Sulph. aluminis ℥ss. Aq. puræ lbij. Solve, lavent. part. affect. hac solut. mane et vesp. Milk diet.

28th. Iterum mittat. sang. brachio. ad. ℥xij. Add. sol. tart. antimon. tart. antim. gr. ij.

Contr. solut. sulph. alum.

March 2nd. He is in some respects, improved; complains of general itchiness, particularly in the ulcerated spots on his thighs. ℞. Sulph. precip. ℥j. Adip. suill. ℥iij. ft. ungt. adhib. ulcer. femoris regione.

Contr. alia.

7th. The eruption is much better but he complains still of itchiness.

Contr. medicam.

℞. Chlorid. calc. ℥ss. Aquæ puræ lbij., utat. pro lavatione subinde.

9th. Eruption still better. Itchiness remains.

Contr. omnia sed omitt. sol. tart. antimon. Sumat omni nocte. pulv. doveri. gr. xv. et secund. q. q. mane. haust. nig. ℥iij

March 10th. Itchiness has increased very much; eruption looks very much improved.

Omit. medicament.

Descend. omni nocte in baln. tepid., adhib. part. affect. cataplasm. emoll.

℞ Submur. hydr. gr. ij.; Pulv. opii, gr. j. Ft. pilul. o. nocte sumend.; Hab. secund. q. q. mane haust nig., ℥iv.

12th Itchiness somewhat relieved.

Omittr. cataplasmat.

Curent. part. affect. c. ungt. oxid. zinci.

14th. His complaints are again increased, and the discharge from the diseased parts is copious.

Contr. pilul. et haust. nigr.; omittr. omnia alia.

℞ Pulv. tart. antimon., gr iij.; Aq. acet. ammon. ℥i; Aq. puræ, ℥v. Sumat ℥j. quarta q. q. hor.

℞ Hydriod. potass., ℥ iij.; Aq. puræ, lbij. Solve; utat. pro lavatione ad part. affect. mane et vesp.

17th. He is feverish to-day; eruption much as formerly, pulse full and quick.

Omittr. lot hydriod. potass.; contr. sol. tart. antimon. Fiat V. S. ad ℥xij. Lavent. part. affec. c. sol. sequent.

℞ Aq. acetat. Ammon., ℥iij.; Sp. camphorat., Aquæ puræ, aa. lbj. M.

18th. Blood drawn yesterday is buffy; patient still feverish; eruption more painful, red, and irritable.

Adhib. ulcer. cataplasm. emoll. et cras. mane. hirudin. viij. Contr. alia.

20th. Rept. hirud. xij. Contr. alia.

21st. Rept. hirud. xij. iterum.

Contr. alia.

25th. Eruption much the same; fever gone.

Contr. omnia.

27th. Not much improved.

Omittr. medicine. omnia.

℞ Decoct. Sarsæ, lbj; Sol. arsen. Fowler., *m.* viij. In die sumend.

Adhib. ad cutem rubent. pulv. tritici.

30th. Again somewhat feverish; pulse 104, full; skin much the same; several parts discharging considerably.

Adhib. cataplasm. emoll.

℞ Aq. calcis, ℥viij.; oxymur. hydr., gr. viij. Solve; lavent. part. exudent. hac sol. ter in die.

Contin. alia.

April 1st. Redness, discharge, itchiness of skin, somewhat relieved.

Contr. decoct. c. sol. Fowlerian.; Adhib. iter. pulv. tritici.

3rd. Again complains of excessive itchiness; discharge from skin slight; general health improved.

Contr. omnia.

Hab. hor somni. pulv. Doveri. gr. xv.

4th. Omittr. pulv. tritici.

℞ Aq. acetat. ammon., ℥iij.; Pulv. tart. antimon. gr j. Syrup. simpl. ℥j.; Aq. puræ, ℥iv. In die sumend.

Contr. decoct.

9th. Improved; some pain of the thighs.

Fricet. femor. c. ungt. simpl. Mane et vesp.

Adhib. hirud. vj. part. dolent.

10th. Complains of sickness; skin rather hot. Bowels regular; leeches have relieved. Omittr. Decoct.; contr. mistur. salin.

11th. Skin improved but still feverish with considerable cough. Adhib. C. C. ad stern. super., ut. educant. sang. ℥vj.

Contr. Mistur. salin. diaphor.

18th. Is again free from fever. Rept. decoct. sarsæ c. sol. fowler. contr. mistur. salin.

20th. Some pain in the left thigh. Adhib. hirud. vi. ad femor. sinistr.; contr. alia.

21st. Iterum adhib. hirud. viij femor. sinistr.

28th. Complains still of his limbs; adhib. cataplasm. emoll. part. dolent.

May 3rd. Legs remain the same, particularly the left. Otherwise he is nearly well.

Adhib. cruri sinistr. lintea c. decoct. ulmi madefact.

13th. Much improved; left limb still a little irritable.

Adhib. hirud. viij. ad. crur. sinistr.

Contr. alia.

June 4th. Has improved rapidly since last report. His disease is now entirely gone, except in left lower extremity, which is still affected, but to a much less extent than formerly. Skin of affected parts a little tender; scaly laminæ of cuticle peeling off.

Omittr. medic.

7th. Dismissed; cured.

COMPOUND FRACTURE OF CRANIUM; DEPRESSION OF BONE.—RECOVERY.

July 29, 1845. John Rankin, aged 13, a school boy, was admitted at half past 12 p.m. under the care of Dr. Hannay. An hour before admission the patient was said to have received a blow on the crown of his head from a brick bat, which fell from a height of four stories.

On admission, he lay quietly in bed on his back, his eyes were shut, expression quite calm, and respirations natural. When spoken to he seemed much annoyed, and when touched opened his eyes, moved his limbs violently and cried out loudly, relapsing again into his quiet and relaxed state immediately on being let alone. He did not put out his tongue when asked. Pupils widely dilated and insensible to light; urine been passed in bed. Limbs cold. Pulse 40.

Over posterior part of left parietal bone is a clean incised wound of the scalp 3 inches in length, at the bottom of which the skull is fractured and a portion of considerable extent depressed to a depth equal to the thickness of the bone. Depressed portion is triangular in shape, and a fissure is found running forwards towards the sagittal suture. There is no swelling or puffiness around the scalp wound. On right side of forehead, an inch and a half above the orbital ridge is a small circular wound with considerable surrounding ecchymosis and in which bone is felt bare. There has been no bleeding from ears and very little from wounds.

Hab. stat. fotus pedib. Injiciat. stat. enema terebinth. Abradt. capill.

2, p. m. He lies on his back, and his limbs are bent in the most relaxed manner; he cannot be made to speak or exhibit any consciousness, though his external senses are entire. No convulsions or paralysis. Left pupil is contracted and very dull, the right dilated and insensible. Pulse 64. Respirations 22, calm and full. Temperature restored. Eyebrows knitted, though his expression otherwise calm. Injection operated, dejection scanty. Occasional vomiting. Milk diet.

℞. Calomel. gr. vi. Pulv. Gambog. gr. viii., ft. elect. ℞. Calomel. gr. ij. Pulv. Jacobi. gr. ij.; ft. pulv. sumat j. tert. q. q. hora.

30th. He lay quiet till one this morning; he required an enema after the powder, when the bowels were freely moved; stools passed unconsciously and in bed. At present he lies on his back like a person in calm repose. Pupils similar in size; responsive to light but sluggish; no swelling, redness or tenderness around wounds. Pulse 60. Small, slow and regular. No vomiting; swallows readily. Voids urine in bed without being conscious of it.

Sumat pulv. iv quarta q. q. hor. tant. Injiciat. enema domestic. quamprim. et [illegible] vesp.

Pupils, though sluggish, [illegible] nearly natural; some improvement has taken place as regards consciousness; he is occasionally restless and difficult to manage; pulse 72, of good strength, regular and soft; heat of scalp moderate; wound free from tenderness, redness, and swelling. One free dejection has occurred, and he has passed a large, lumbricus teres.

Contr. pulv., et injiciat. enema domestic. s. o. s.

August 1. Some small improvement of consciousness; still lies in a drowsy state; pupils still sluggish; occasionally restless; bowels freely opened; pulse 72, regular. Urine and dejections passed in bed, and apparently without his knowing it. Wounds as yesterday.

Sumat pulv. 8va. q. q. hor. tant. utat. lotion frigid. p. r. n.

2nd. Expression improved; opens eyes and gazes around him; answers yes and no, but seemingly without understanding the questions asked; yawns frequently, and seems drowsy. Urine and dejections passed in bed, the latter consisting chiefly of mucus and blood. Wounds as formerly. He has taken some porridge and broth with apparent relish. Pulse and skin as formerly.

Omitt. pulv., contr. lotion. frigid.

3rd. Consciousness and intelligence slowly return-

ing. To-day he desired to get out of bed, when having a stool. When asked to show his tongue, he gazes fixedly, but does not betray any token of understanding the request; still heavy and drowsy, but easily aroused. Pupils now natural. The wound on the forehead has healed, and the posterior wound is perfectly healthy; pulse now natural, but towards evening it becomes quicker, with some heat of skin.

℞ Sp. æth. nitros. ʒij., Vin. antimon. ʒi, Potus imperial. lbij. Part. vicib. in dies bibend. Hab. pulv. hydr. c. creta ʒss. in chart. viij. equal. divid. Sumat j. decoct. avenæ 8va. q. q. hora.

4th. Still sluggish, somewhat confused, and lethargic, but easily roused; seems to know the persons about him; takes some nourishment; bowels relaxed; pulse 72.

Contr. omnia., sed sumat pulv. ter in dies taut.

7th. Has continued to improve in the same gradual manner, and now his consciousness and natural appearance are quite restored. His pupils are natural, and he sleeps well, and takes his food with relish; he voids his urine and stools with perfect consciousness, and answers rationally. The wound is well, the scalp cool, and the skin cool and moist. There is still slight confusion and a fixed, unmeaning gaze, however; some slight irritation of the ●ctum, mucus, and traces of blood in stools; pulse 68.

Rept. abras. capill.; contr. potus.

8th. Much as yesterday; answers rationally, and speaks of home and affairs there; pulse, tongue, and skin, natural.

Contr.

10th. Frequent natural dejections; no complaint. To have beef-tea and rice for diet.

Contr. alia.

11th. Wound on the scalp is uniting at each extremity; the bone is bare at the bottom of wound, of an ivory colour, and no granulations are present on or around it. Free from complaint.

Omittr. medicament.

14th. Continues well. Wound filling up at extremities; slight discharge,

20th. Wound nearly filled up, save a small position in centre, leading down to bare bone. Is in perfect health; occasionally gets out of bed; feels tolerably strong.

27th. The patient's parents wish to take him home, as he has gone on well since last report. Wound as before; slight discharge.

Dismissed.

Sept. 24th, 1845. Since his dismission from the hospital, the patient has come up about once a-week to have his head examined. He walks up unaccompanied.

Small pieces of the outer table of the fractured and depressed portion of bone have come away, and the wound is now nearly healed.

A depression can be easily felt through the scalp. His general health is perfect.

REVIEWS.

Anatomical and Clinical Researches on Various Diseases peculiar to Infancy. By F. L. Legendre, M.D., interne and laureate (gold medal) of the hospitals of Paris. Paris, Masson. 1846. 8vo. p.p. 449.

The work before us is the result of several years' attentive and fruitful observations. It contains valuable practical results, and most accurate researches in morbid anatomy. It may not therefore be out of place to lay before our readers a rapid sketch of its leading chapters, particularly as it will afford us an opportunity of bringing forward the opinions of the best French authors, on the most disputed points of the diseases of infancy. The discrepancy of statements relative to some of the most important points, and, to those it would seem, most easily ascertained by statistical research, may be explained by the fact, that, it is only during seven years, that an hospital has been opened in Paris for infants under two years of age: every assertion therefore of M. M. Louis, Rilliet, and Barthez, and even of Dr. Legendre must be considered to apply more particularly to children of more advanced years.

M. Legendre studies in separate chapters, tubercular meningitis, meningeal hemorrhage, pulmonary inflammations, scarlatina, diarrhœa, etc. We will confine ourselves in our first critical remarks to the analysis of the two first chapters.

Tubercular Meningitis.—M. Legendre begins this chapter with the assertion, that general tuberculisation is observed more commonly between the ages of six and fifteen, than at any other period of infancy. On this point he agrees perfectly with M. M. Rilliet and Barthez. Dr. Louis on the contrary states, that in childhood tubercles are common between two and eight years, and diminish in frequency from that period, to puberty. Professor Trousseau, on the other hand, distinctly asserts, that under two years, more infants are carried off by consumption (tubercular), than by all other causes of dissolution put together. Our author distinguishes two forms of meningitis, according as the cerebral symptoms are noticed in subjects apparently healthy, or in infants evidently labouring under a tubercular diathesis. The distinction is one which must strike all those who have had opportunities of personally observing numerous cases of meningitis; this classification would however, have much gained in value, if Dr. Legendre had pointed out the diagnostic marks, which separate his first form from essential meningitis. The symptoms of the disease occurring in apparently healthy children, are, according to Dr. Legendre, remarkably regular in their succession, — not so, in the second form: the morbid cerebral manifestations are obscure, and often cause some hesitation in the diagnosis. The description of the progress of the disorder is most accurate: — The irregularity of the pulse, and the changeable nature of the paralysis, during the second period are pointed out with care: we should have wished to have also M. L's opinion of the value of Professor Trousseau's sign—the macula meningitica,—the importance of which we have often seen tested by practical experiment. Two other remakable appearances are insisted upon by the learned authority, we have just quoted: the first of which is the singular irregularity of the respiratory movements. If the comatose infant be watched attentively, he is seen to sigh deeply, and to make two or three rapid inspirations; an interval then occurs, which sometimes lasts so long as forty-five or fifty seconds, when the respiratory movement is again repeated. The other circumstance to which we refer, is the length of time, during which infants affected with meningitis preserve their flesh, contrasted with the extreme rapidity, with which the cellular tissue is absorbed in other acute disorders. All these symptoms mark the destruction of the connecting link between cerebral influence, and the function of nutrition, and as such deserve a place in the history of meningitis.

In the morbid anatomy of the malady, M. L. remarks the absence of pus in a *liquid* state; the constant integrity of the arachnoid membrane has also fixed his attention. The granulations of the pia mater, alone, are seldom in M. Legendre's opinion the cause of death: they are however the proximate cause of cerebral inflammation. In no one instance was the tubercular production limited to the envelopes of the cerebrum. M. Legendre's observations bore upon twenty-eight subjects, and in three-fourths of the cases, tubercular matter was found in more than three organs. When the patients had died from the progress of the second form of disease, the only anatomical difference was the more advanced state of general tuberculisation. The method of treatment recommended, in this almost constantly fatal malady, is local depletion, by the application of leeches to the pituitary membrane, and the exhibition of calomel in minute hourly doses.

Meningeal Apoplexy.—This is the only form of apoplexy noticed in children, it is the occasion of a peculiar form of hydrocephalus. Seven cases fell under M. Legendre's observation, during the space of two years, and permitted him to investigate the anatomical characters of the disease. Death occurring from the eighth to the twelfth day from the invasion of the symptoms, pure blood could not be met with in the arachnoid. Clots flattened by pressure to the shape of membranes, were however observed, and collections of bloody serum, varying in quantity from six to eight ounces. In general the hemorrhage occupied both sides of the head, no great enlargement of which was noticed; the sutures and the anterior fontanelle, however had not united. When life is prolonged beyond the first period of the malady, a cyst is formed, always attacked to the parietal arachnoid, by adhesions, and free from any attachment to the visceral portion of the membranes: the quantity of liquid contained in the cyst has been found equal to a pound and half, but M. Legendre never met with more than twelve ounces. The symptoms of the first period consist of fever, marked by heat of skin, and a quick *but regular* pulse, contraction of the hands and feet, and convulsions. M. Legendre never noticed any sort of paralysis. The great practical deduction, to be gathered from this chapter is that chronic hydrocephalus, arising from meningeal hemorrhage, is a disease in which more sanguine hopes are warranted, than in ventricular hydrocephalus. The diagnosis, between the two forms, is therefore a point of first-rate importance, and rests upon the following facts:—ventricular hydrocephalus, begins at, or soon after birth, and the head may acquire an enormous magnitude: arachnoidian hydrocephalus, begins only eight or ten months after birth, the head never acquires a very considerable size, and the disease is marked at its first appearance by fever and convulsions. For the treatment, of the acute stage, M. Legendre recommends cold applications to the head, and revulsion on the lower extremities. During the second period, he is of opinion that absorption of the fluid might be hastened by revulsion on the head, calomel internally, and diuretics. Compression of the head is also advised, but this method should be employed with the greatest prudence, We should not forget, that a learned professor, having employed this method, without the necessary precautions, the child died from rupture of the basis of the cranium.

TO CORRESPONDENTS.

C.—*The details of the "Fellow election" are not worth entering on. No gentleman was disgraced by being passed over: no "fellow" was honoured by being chosen.*

K.—*Though the grave-yard nuisance is not abated we have no doubt it will be. It is doomed. We have not overlooked the question.*

A Student *is thanked for his information.*

Justus.—*The letter cannot be inserted, because not authenticated.*

M.D.—*The matter is under arrangement. With respect to the Provincial Association, our correspondent may be convinced of the truth of his opinions, so disparaging to the members, who are general Practitioners, but he has failed to convince us.*

Medicus, *in allusion to the Fellows' dinner, writes, "Hear it, ye members of the Royal College! engrave it on your memories! your President declares, in the year of our Lord,* 1846, *'That the Council would resolutely persevere in their unpopular courses, if supported by the Fellows,'* '150 *of whom, it is said, received the assurance with enthusiasm!' What immaculate young gentlemen they must have been! It is not possible, surely, that such fellows can be at large in the nineteenth century? They must be restrained, or the scientific character of the Medical Profession forfeited."*

Mr. Morris *will find his paper in the present number.*

Mr. Finucane.—*An advertisement inserted in the* Medical Times *would most probably obtain for our correspondent the kind of situation he desires.*

Mr. Yates's *shall receive a private note from the editor.*

A. M. A's *request shall be complied with. We omitted the questions because we considered them unworthy insertion. The great desideratum we believe to be the fee paid for the fellowship.*

Mr. Burke, *surgeon, of Tuam, Ireland, writes,—"The extensive circulation which your Journal commands among pharmaceutical as well as medical men, induces me to make it the medium of communicating the following new and simple test for the detection of a substance with which nitrate of silver is extensively adulterated, viz., nitrate of potash. The suspected nitrate of silver being dissolved in distilled water, tartaric acid is to be added to the solution, which will have no effect if the nitrate be pure; but if potash be present there will be an abundant precipitate. This test is easily applied, and may be relied on."*

A Member of the Oxford Medico-Chirurgical Society *does not receive his papers directly from the office of the* Medical Times. *All numbers sent out from the office to subscribers are carefully and correctly folded: copies obtained through a bookseller are not folded at the* Medical Times *office, and are, consequently, sometimes liable to be paged incorrectly. The same fault occurs occasionally in the* Athenæum, *and, indeed, in all journals of very extensive circulation.*

D. S. S. *will find residence in an University where the degree of M.D. is granted, to be requisite for admission to the examinations of the University of Edinburgh.*

☞ *Gentlemen in arrears since Midsummer are requested to forward their subscriptions during the present week.*

The MEDICAL TIMES is the only Medical Journal published at its own Office, and which is free from the control of all Booksellers and Publishers. Gentlemen may procure it by an order on any Newsman or Bookseller, or it will be sent direct from the Office of the Medical Times, *to Annual Subscribers, sending by a Post-office order, directed "James Angerstein Carfrae," or an order on some party in town, One Guinea IN ADVANCE, which will free them for twelve months. Half-Yearly Subscription, 13s.; Quarterly, 6s. 6d. No number of the* Medical Times *can be forwarded, except to gentlemen paying in advance.*

THE MEDICAL TIMES.

SATURDAY, AUGUST 8, 1846.

Justitiæ partes sunt non violare homines; verecundiæ non offendere.—CICERO.

IN concluding our comparison of professions, and of professional rewards and honours, we will take a passing glance at the bar.

Curran used to say that the first *desideratum* for a man's success at the bar, was to be not worth a shilling. His own career was an apt illustration of his saying; and in the career of many a man besides, equally distinguished with himself, it has been amply corroborated. Favouritism may have occasionally done an obscure man some service, in his commencement as a barrister; but this favouritism is only another name for the gracious act of giving intellect and industry an opportunity of developing themselves. No amount of personal or political trickery can give to a simple man the superiority over a wise one, when they compete together openly, and have public opinion for their judge. The truth of this observation is fully attested in the preference often obtained at the bar, by comparative indigence and obscurity, over wealth and patronage. This is the cardinal advantage that the three professions of arms, divinity, and law, have over ourselves—their deeds are public, and if meritorious, popular—we "do good by stealth," and are expected to blush if we find it fame. We get none of the credit that they get, whatever the excellence or success of our exertions.

It is hardly necessary that we should pause to inquire what amount of mental qualification a man needs, as a *sine qua non* to his promotion at the bar? Some men have shone very well, and gathered a goodly recompense, with a very average stock of this commodity: others, better supplied in the aforesaid sense, have proportionately advanced in fame and fortune. At any rate, we have no proof that a larger intellectual capacity is wanted for law than for physic; and very certain we are, that the attainments are neither more diversified nor more difficult, in the former than in the latter profession. Concerning the ultimate object of the two professions, the loftier is certainly on our own side. "All that a man hath will he give for his life," says the proverb; and every day's experience teaches us that worldly professions bear an inferior ratio to the desire of existence and health. To rescue a man from the grave, is certainly to render him a greater service than to save his estates from ruin; and to preserve the health and strength of a nation, is surely not inferior to administering laws for its good government. However the legal and medical professions may be viewed in comparison, we are assured that, in moral and intellectual dignity, and in public usefulness, our own ranks in nothing inferior.

Now, look at the relative advantages offered to the votaries of these two professions. If a man only have a tolerable start at the bar, and have anything more than an ordinary head to make it available, there is no saying where his preferment or perquisites may end. Besides that his immediate occupation furnishes for him emolument unparalleled, at least in physic, there are ultimate gains and gifts, in the possession of which the bar is singular. One man, in this lofty legal circle, pursues a career of lucrative practice for some years, and then, a commissionership, or other such bounty, falls in his way, and he has little to do, and is largely recompensed, all the rest of his days. Another man, after a probation perhaps not very protracted, during which he has been in the reverse of a starving position, finds the bench opens its affluent arms to receive him, and he cozily sits down, largely wigged and wealthy, for the remaining term of his natural life. A third, more ambitious, enterprising, and energetic, than the others, "flies at higher game," and seldom fails to reach it. He was distinguished, was this man, at college, for his literary acquirements and oratorical brilliancy. Whilst keeping "terms," his skill in debate, and his amount of legal knowledge, attracted attention towards him, and his *debut* at the bar was consequently made under the favourable auspices of ready-made reputation. Success attended his professional career, and it was not long before he was persuaded to contest a public election, the issue of which was to number him amongst the political representatives of the people. No sooner in the house, than he attracted its regard, and one ministerial change and another hurried him along the line of preferment, until he found his final status on the cushion of the Chancellor. This circuitous path, however, is not essential to the attainment, from the bar, of one of the highest dignities in the realm. A man's legal reputation may make it desirable that the government should select him for the office of Solicitor-General, into which he is first duly installed, and then, he is leisurely returned M.P. for some snug place that dare do none other than accept him. Once enstalled into this legislatorial office, pay, pension, and title are his peculiar privileges. A knighthood, a baronetcy, and the peerage, are the insignia of his success. If not "the father of a line of kings," he may become the father of a line of lords, and create a name and a character that will live till doomsday.

Now, in this distinction we see nothing unfair or improper; on the contrary, we think it a tribute due to talent, and the withholding of it we should call injustice. The surest way to procure intellect, is to promote the possessors of it. It is a purchaseable commodity, and is likely to be offered in the greatest plenty where it is most demanded, and the best price is given for it. No doubt the celebrity of the bar is maintained by the inducements which it affords to enterprising intelligence. Were those inducements to be withdrawn, the intellectual affluence of this community would sink with its grosser wealth, and the honour and fame that are now its boast would be lost to it for ever. It was nothing more than considering "the labourer worthy of his hire," when it was first projected to give to legal distinction title and fortune; and valuable though these are, they are not more than equivalent to the talent that inherits them.

Having freely accorded to the legal profession all the merit that is due to it, and grudged it none of its preferments and perquisites, we feel quite at liberty to ask why ourselves are shut out from every shadow of such advantages? Intellectually, morally, and in public usefulness, we are not an iota behind the bar, and yet how differently do we fare! Why should there be no elevated position, the creation of a just and generous government, for the enlightened and experienced of our profession to attain to, as the reward of industry, benevolence, and skill? Would it not be worthy of the elite amongst us, that in their latter days they should have honourable preferment equally with the pulpit and the bar? Does consummate skill in one of the noblest of professions; do years of gratuitous exercise of that skill upon the suffering poor; does the advancement of that generous science which teaches the relief and cure of disease; does a life of rectitude, and of incessant devotion to the interests of humanity, disentitle the author of these things to worldly distinction and fame? For ourselves, we should look upon deserts like these as the greatest claims that could be made

upon the generosity and gratitude of the world. And wherefore is the dutiful tribute withheld? Why, in this country at least, does not the representative power give honour where honour is due? We are not aware that the profession would be anything advantaged were a dozen of its greatest men to be selected for title, and placed on a bench in the House of Lords; and yet, we see no reason why the pulpit should send sundry of its members to this elevated quarter and ourselves send none. We are not aware that parson's heads are any better fitted for legislating than our own would be, were we afforded the opportunity of exercising them. At any rate we see a gross injustice in shutting us out from title and emolument when the clergy have these things so open to them. And the same may we say of the bar. In the walks of legislation we have no desire to be their rivals; but these said walks are the recompense of talent and industry. And why, again we ask, is there no like *ultimatum* for us? Anywhere but in England the medical profession is judged of in proportion to its merits, and rewarded accordingly. But here, in the face of boasted liberality, and encouragement of literature and science, we get no quarter. In France, the physician and surgeon are appreciated as they deserve, and are not denied the honours to which other professions attain. They are decorated with some of the choicest insignia of the realm, and are admitted without scruple to the dignities of the peerage! This is generosity and justice in happy companionship. And who will say that France does not reflect honour upon herself in this virtuous judgment? And when may we hope that England will do itself the credit of imitating so lofty an example? When may we hope to see the mean, offensive old prejudices swept from the minds of our senators, and their hearts opened to reward and dignify the deserving? We should particularly like to know why a peerage is closed against us, when it receives members of other professions without scruple? We are aware that there must be some drawback, but we have never yet been able to learn what it is. In none of these qualities that adorn mankind, can we find ourselves one jot or tittle inferior to others more favoured than we are, and hence our cry—wherefore the injustice? We shall feel deeply gratified if any one, having authority, will solve a problem that has so long puzzled us. George the Fourth, we know, was a great admirer and friend of Sir Henry Halford, and, it was said, desired to have him raised to the peerage, but all to no purpose. The man who was physician to four sovereigns, a distinction unparallelled, enjoyed a baronetcy in common with many a retired linendraper, cheesemonger, or tallow-chandler, but nothing beyond, save two little, almost nameless, distinctions, given by the last William and George. Whilst their contemporaries, on the continent, were in the enjoyment of the titles of nobility—a title, the noblest, when worn by those who have earned it, Baillie, Halford, Cooper, Abernethy, and others of their order, in generous England, gained the distinction of retired tradesmen—*and nothing more!* Oh! how pitifully, contemptibly mean does our country's character look, when, with all its boasted enlightenment and love of learning and science, and its patronizing propensities forsooth, it is on these very counts weighed in the scale against other nations and found wanting! We can only blush for its faults, and pray Providence to hasten their amendment. We have been prompted to the utterance of these unpalatable truths from a stern sense of the injustice under which, as a profession, we labour. Our heart's desire is, that those who are in high places may be speedily disposed to render us the recompense that is our due.

Quum tua pervideas oculis mala lippus inunctis,
Cur in amicorum vitiis tam cernis acutum,
Quam aut aquila, aut serpens Epidaurius? At tibi contra
Evenit, inquirant vitia ut tua rursus et illi.   HORACE.

The Council of our English College of Surgeons have so habituated us to follies, perpetrated on the largest scale, as to have spoiled our relish for any ordinary piece of turpitude or blundering. Our editorial tablets hold against them this week, the tale of a small wrong, mischievous, *directly*, to no more than an individual, but in asking attention to it we feel like the barrister, who, after convicting a prisoner of some half dozen capital felonies, puts the wretch under trial for a petty larceny. Yet, in our case, the labour is perhaps not all lost. If the criminals be past punishment as past recovery, it is something still to do justice to their innocent victim. Let us briefly tell our tale therefore.

The appointment, some years since, of three studentships in comparative anatomy, with a salary of one hundred pounds a year each, has been, as our readers know, the only decent thing done by the Council during the last decade of their deplorable reign. It was the one solitary fact that indicated a knowledge that there existed such a thing as "public" and was such an idea as a "duty." As might be expected, the deviation has been matter of repentance ever since. It was an anomaly not to be forgiven even to themselves; like a dove in a rookery, it was a *rara avis* to be pecked out of place and plumage the first opportunity. Since that unfortunate day of partial goodness, therefore, the great policy of these large-minded men has been to retrograde practically whence, in a moment of weakness, they advanced speculatively. True, to their system of the worst possible mismanagement, they have been superlatively active in making their one boon inoperative.

Two years since, one of these studentships (cut down from three to two!) was obtained, after the usual competition, by a clever young man, Mr. Pittard, recently a student of King's College. For months his good fortune set the Council's ingenuity at defiance; but, unfortunately, as an evil fate would have it, in June last, the managers of the Aldersgate medical school, did the college the honour of asking its pupil, Mr. Pittard, to take the situation of its summer lecturer on comparative anatomy; an office that might be discharged in over hours, and which, in every sense, was a post the reverse of incompatible with the duties of his studentship. The college patronage had won its legitimate consequence; its prize had at once attracted and rewarded merit; its liberality had opened to a worthy young man a high career of science. So much the worse for Mr. Pittard, and so much the greater reason for collegiate interposision and collegiate obstruction. The boon was doing, alas! but too much good without such an unexpected contingency. The Council met in haste—a general indignation was felt at so insulting an amount of deserved success. Without more ado than hearing the "*report*" that there was such a lectorship, they suspended Mr. Pittard from his studentship! They asked no explanation from their too fortunate *protege*; they content themselves with a verbal announcement, through one of their servants, that Mr. Pittard was suspended "till an enquiry should be made."

Castigatque, auditque.

They punish first to make sure; and then "*enquire*" whether there were grounds! Any thing to avenge the scientific successes of a *too* scientific pupil!

This wrong differs from most others in this:—that not even the fragment of a case can be set up for it. Radamanthus like, they punish on a rumour which is not matter of *belief* but of "*enquiry*." Then, the "rumour" implies no charge that Mr. Pittard abstracts any time from the College which the college can claim from him, or that the over time given to other labours is given to any thing not akin to the duties of his studentship. On the contrary, the discharge of his collegiate duties stands unimpeached, and his other labours have a direct bearing on the science the college affects; to encourage. Finally, what Mr. Pittard has done has been done, unreproved, by those who have preceded him in the same office; and consistently to condemn his conduct the Council must first perpetrate the outrage of censuring a Quekett and an Owen for their extra-collegiate contributions to sanatory and scientific improvement. The injustice, we own, is intrinsically small, and affects but one individual, but the Council, with their customary fatality, have contrived to throw about it every possible adjunct of mis-doing. They touch nothing but to deform it—to deform it in excess! But we have already said too much, on this small matter, of a body whom to mention on any matter is to condemn. Our readers will pardon us the needless inculpation, and overlook our brief trespass on an attention palled by larger by the reflection that if on one side we cannot make black blacker, it is something on the other to keep white undarkened by the contact.

THE CHOLERA.

It is our pleasing duty to state that the official statements of the existence of Asiatic cholera in the metropolis are wholly unfounded in fact. Some cases of diarrhœa and dysentery have occurred in about the proportion we might have expected from the excessive heat of the season; but, as yet, no instance of the much dreaded visitor has made its appearance. The civic proclamation which recently alarmed the public

arose from some hasty mistake of a functionary long known about the corporation precincts as the "Columbus of mare's nests"—we mean Sir Peter Laurie.

INQUEST AT HOUNSLOW.

We have much more to say on this interesting subject. If the coroner's inquisition be not quashed by law, it shall receive the equivalent justice from the public, and be valued at its worth. We give as data for further comment, the medical evidence of Monday last, as given us though the (in *this* case) very partial report of *The Times.*

The depositions of the medical witnesses were here read to them.

Mr. Day made a complaint that Mr. Wilson had, *in addition to the statements they had agreed on making at the post mortem examination, given in evidence opinions which he (Mr. Day) had not acceded to,* and from which he dissented. He did not consider that inflammation of the pleura could be caused by the muscular disorganization observed, for that was covered by the intercostal muscles.

The Coroner.—*But is it not a fact, Mr. Day, that a formation of mattery substance connected with the veins of the skin is often the cause of inflammation of the lungs.*

Mr. Day.—Yes it is so; but I do not think that in the case of the deceased, the muscular disorganization was the cause of death.

When the reading of the depositions was concluded, *the medical gentlemen were ordered to leave the room, and each was summoned in separately* in the order in which he had given his evidence, to say what, in his opinion, after having heard all the evidence in the case, had been the cause of the deceased's death.

Dr. Warren.—The first in order who entered the room, repeated his former statement, that White had died of inflammation of the pleura and heart, with its connecting vessels, and that the flogging had in no way caused his death. The deceased was not depressed in spirits, for had he been so, he (Dr. Warren,) who visited the hospital twice every day, must have noticed the fact.

The Coroner.—It is your belief that if he had not been flogged, he would have been alive now?

Dr. Warren.—That is a question which no human being can answer; and the man who ventures to do so puts a great deal at stake.

The Coroner.—You cannot fail to bear in mind that on you devolved the duty of examining the deceased on the day he was tried, and again on that of his punishment. The jury will, therefore, infer that you satisfied yourself he was a sound man.

Dr. Warren.—I find, that in the admission and discharge-book, he has been only three times in hospital for six years. Had I found him faint during the flogging, I would have ordered him to be taken down. I admit that an intermitting pulse shows a greater state of danger than even fainting; but I have no instructions on such occasions as to how I am to discharge my duty—(A pause here, followed, after which Dr. Warren, with a degree of feeling which excited marks of applause in court, said)—I beg to say that it is to me a most painful duty to witness such an operation, and I should be most happy to think that I should never be called upon again to witness so disgusting a scene.

Dr. Hall, the next medical gentleman admitted, said,—after hearing the evidence, I am still of opinion that the deceased died from inflammation of the heart, lungs, and pleura, and notwithstanding the evidence of Mathewson and Reilly, cannot connect the disease with the punishment, or subscribe to the novel doctrine of Mr. Wilson. He does not ascribe this changed condition of the deep-seated muscles to the violence of the lash, as they were protected from that by their position, and by the superjacent parts, but to excessive contraction during the agony of punishment, and subsequent disorganizing inflammation from nervous depression. Now, White was in the prime of life, and does not appear, by the statements we have just heard read, to have suffered much from nervous depression. It is strange, therefore, and unaccountable to me, why nature should have made no efforts to repair this injury, or that her efforts should have been of a disorganizing kind in this particular spot, while the process of healthy reparation was proceeding rapidly in other parts of his frame. The injury itself, too, is one of a novel kind, and difficult to reconcile to our preconceived opinions of the limited power and action of the small muscles alluded to. White, the witnesses all say, bore his punishment without any struggling; and Dr. Warren says he observed no spasmodic action of the muscles of the spine. Besides, had Mr. Wilson ever witnessed the infliction of corporal punishment he would have seen that it is the superficial layers of muscles which attach the shoulder-blades to the spine that are thrown in action, and had any rupture of muscular fibre taken place from violent contraction, it would most likely have occurred amongst those, and not among the deeper-seated ones along the spine, which have such limited contractile power, and are so well protected from injury. Mr. Wilson lays much stress on the injurious effects likely to have been produced by this altered portion of muscular fibre lying in contact with the intercostal spaces; but it seems to have escaped his recollection that the cavity of the chest on that side was filled with diseased and disorganized viscera, and highly putrid, fluids, which were much more likely to have contaminated the adjacent muscles, than that the small portion of pulpy fibre should have occasioned the extensive disease that was discovered within the chest. The only wonder is, after 11 day's exposure of the body, at this hot season of the year, that the change of structure was not still more extensive. Mr. Wilson states that he has dissected from 500 to 1,000 bodies in the course of his professional researches. I have also served much in warm climates, where deaths unfortunately are very common, and decomposition of the body after death very rapid, and I should say from Mr. Wilson's description that the change he observed was merely the first stage of putrefaction.

The Coroner.—Is it not the limited powers of contraction in the muscles which Mr. Wilson refers to which makes them subject to injury?

Dr. Hall.—I should say that the change observed by him was the first stage of putrefaction. I regret that I was excluded from the subsequent *post mortem* examination, and I enter my protest against that exclusion.

The Coroner.—Will you state what right you had to be present more than any other person?

Dr. Hall.—I think it was only fair from the particular turn which public opinion had taken on the subject that I should be present.

The Coroner.—In point of fact, the irregularities which have preceded have brought us into many difficulties.

Dr. Hall.—I don't admit that those proceedings were irregular, because, in point of fact, it was a public examination.

The Coroner.—How happens it that you were sent for at all, Dr. Hall? What were the special circumstances which led to that? Do you not believe that it was in consequence of the deceased dying so soon after being flogged?

Dr. Hall.—I was sent to make the *post-mortem* examination in consequence of the report I had previously made about White to Sir James M'Gregor.

The Coroner.—In your report, you say, it appears, White received corporal punishment of 150 lashes.—Why did you mention that fact, if you did not connect it with his illness?

Dr. Hall.—I was bound to say all I knew, and I considered it important to state that fact.

The Coroner.—It would have relieved us of a great deal of difficulty if notice had been given at once to the constable, and an inquest had been constituted on the first *post-mortem* examination. You have made your report, and sent in your opinion, and now you complain that you were not present at an examination made by a surgeon who came before the court as an unbiassed person. You yourself have in your report connected the flogging with the death of the deceased.

Dr. Hall.—The connexion exists, but it is not one of cause and effect.

The Coroner.—Could you form any idea as to the state of deceased's mind from the *post-mortem* examination?

Dr. Hall.—No, I could not; the appearances of disease in the brain were not sufficiently decided for that; but they looked as if the deceased had had delirium tremens. Dr. Hall concluded by repeating his belief that the death of White was to be accounted for by the sudden change of temperature on the 5th and 6th of July, amounting to a difference of more than twenty degrees.

The Coroner drew Dr. Hall's attention more than once to the expression used in his report, that the circumstances of the case were peculiarly interesting.

Dr. Reid and Mr. Day repeated their belief, expressed in evidence on a previous day, that the deceased had died from inflammation of the heart, lungs, and pleura, brought on by atmospheric changes, and having nothing to do with the punishment inflicted on him.

The punishment might have had some effect in producing the disease.

The Coroner here asked Dr. Hall if he considered the letter, dated the 25th of June, written by deceased to his brother, to be the letter of a man in cheerful spirits?

Dr. Hall replied that there appeared only one passage in this letter which could indicate to the contrary, and, in opposition to the conclusion to be drawn from this, he set the statements of all the witnesses, that White had not been, and had not appeared, depressed in spirits.

Mr. Wilson was then called.

The Coroner put the question:—After hearing the depositions, what do you consider was the cause, of the deceased, White's, death. No question of it, the flogging, and its consequences upon his health. The inducement to me to form that opinion is, that death from flogging is of no uncommon occurrence. The diseases following upon flogging in general are identical with those which manifested themselves in the case of White. I hold in my hand some abstract cases of flogging, these will prove that my opinions are confirmed by the greatest men in the country.

Dr. Hall was here addressed by the coroner, and was asked if he had any opposing authorities to refer to. He had not. He had seen several hundreds of cases of flogging, and death ensued in one case only out of every thousand.

Mr. Wilson resumed.—Extensive injuries to the skin will produce serious internal irritation. Thus a burn will give rise to fatal disease of the internal organs, viz., stomach and bowels, heart and lungs, liver and kidneys, so that prolonged irritation of the skin in this case was calculated to produce disease. Then there might have been secondary disease, inflammation of the heart, and lungs, weeks after the application of the cause of the original disease. Such cases are frequently to be met with in our hospitals; so that, whether I look at the primary or secondary effects of flogging, I see in both a cause of fatal disease. Heretofore it has been considered that the injuries resulting from flogging are confined to the skin, but I have given evidence that, in this case, the flogging was followed by a pulpy, softening and deranged state of the muscles.

The Coroner.—You will remember that there was in this case a partial recovery.

Mr. Wilson.—It is not an uncommon thing that when, after flogging, the patient is pronounced to be, and thinks himself to be, out of all danger, internal inflammation then commences, and that results in death.

The Coroner.—Leaving out of the question mere speculations, is it your decided opinion, from all you have heard of the history of the case, that the death of White was caused by flogging?—I have not the slightest doubt that it was.

The Coroner.—After deliberating upon all the

facts heard in evidence or observed by yourself, and deliberating upon them as cautiously as you can, do you entertain a doubt on the subject? for if you do, it is your bounden duty to state it.—I have not the slightest doubt on the subject.

Some conversation having ensued between the coroner and Mr. Wilson, touching the contradiction which Mr. Day had offered to the testimony of the latter.

The Coroner said, you have opened from 500 to 1,000 bodies, and in cases of these examinations, did you find such a state of the muscles as that perceived in the case of White to result from decomposition?—No, in no one case.

The Coroner addressed the jury:—The inquest had been called, not because there had been a sudden death, or because there had been a suspicion of poison; the warrant had been demanded on the undisguised suspicion that White had lost his life solely in consequence of the violence of the punishment. The two staff-surgeons having made their examination, and reported their opinions that the death resulted from natural causes, it became necessary for him to intimate to the jury to name their own surgeon, to complete what had been only a partial examination. Mr. Day had been named. Mr. Day, however, himself made but a partial examination, and then confirmed the already-expressed opinions. It had been thought necessary by the jury that a gentleman should be called from London, and that the body, now buried some days, should be by him examined. *He had not hesitated in looking for the most competent person to fix on*—Mr. Erasmus Wilson. It was right he should say that Mr. Wilson was a gentleman of distinguished acquirements in his profession, a first-rate anatomist, and a gentleman with a high character for unimpeachable veracity. The jury, therefore, had to choose their own authority, to select between Mr. Wilson and the three others, also eminent medical gentlemen.

The jury returned with the following verdict:—"That the deceased soldier, Frederick John White, died on the 11 of June, 1846, from the mortal effects of a severe and cruel flogging of 150 lashes, which he received on the 15th of June 1846, at the Cavalry Barracks, on Hounslow Heath, at Heston; that the said flogging was inflicted upon his back and neck, under the sentence of a district Court-martial composed of officers of the 7th. Regiment of Hussars, held on the 10th of June previous, duly constituted for his trial. That the said Court-martial was authorized by law to pass the said severe and cruel sentence; that the flogging was inflicted upon him by two farriers in the presence of John James Whyte, the Lieutenant-Colonel, and James Low Warren, the Surgeon of the said Regiment; and that so, and by means of the said flogging, the death of the said Frederick John White was caused. In returning this verdict, the jury cannot refrain from expressing their horror and disgust at the existence of any law amongst the statutes or regulations of this realm, which permits the revolting punishment of flogging to be inflicted upon British soldiers; and at the same time the jury implore every man in this kingdom to join hand and heart in forwarding petitions to the Legislature, praying in the most urgent terms for the abolitino of every law, order, and regulation which permits the disgraceful practice of flogging to remain one moment longer a stain upon the humanity and fair name of the people of this country."

Miscellaneous Correspondence.

TEETOTALISM A CAUSE OF ACNE.

3, Finsbury Place, South. August 5th, 1846.

[To the Editor of the "Medical Times."]

Sir,—On the principle of the well known motto "*Audi alteram partem*," a principle fully recognized in your highly valued columns, I must ask for the insertion of a few lines in reply to Mr. Fothergill's comments on my opinion, that *Teetotalism* predisposes to Acne. I may in the first place remark that although not a Teetotaler myself, *no advocate of Temperance, however strict, can view with greater repugnance than myself, the vicious habit of excessive, or intemperate indulgence in inebriating drinks*; and that I am so conscious of their noxious tendency in diseases of the skin, (acne included) that few patients come before me, to whom I do not strenuously inculcate the Shakespearian lesson; not—

"To put an enemy in their mouth, to steal away their brains."

With regard however, to the usefulness of a moderate proportion of Alcohol in the dietetic treatment of Acne, I can assure your correspondent that I have daily opportunities of witnessing facts corroborative of this "fancy" of mine, and indicating very clearly that Teetotalism and acne stand in this relation at times of cause and effect. As an exemplification, I beg to subjoin a tabular arrangement of every case of acne, presenting itself at the Cutaneous Institution on Monday and Wednesday last. These memoranda, made in consequence of Mr. F's letter, were taken in the presence of a medical Practitioner (Mr. D. Davies) who is a student at the Institution. The leading questions biased the replies of the patient, which are given as they occurred and in the order of the individual's attendance.

CASE 1.—James Walker, aged 20, of 12, Pitfield-street, Hoxton, Reg. No. 8369.

Form.—Acne simplex et Rosacea, very severe case, 18 months duration, now convalescent.

Habit.—Never drinks beer or spirits at all "a Teetotaler from taste."

CASE 2.—Hester Clements, aged 32, of 10, Brewer-street, Golden-sqr. Reg. 7124.

Form.—Acne Rosacea, severe case of five years standing, now convalescent.

Habit.—Formerly drank beer, but five years ago on account of illness was advised to discontinue it, the eruption has since appeared, now drinks water, or a little spirit and water.

CASE 3.—Fanny Fryer, aged 36, of Brunswick Terrace, City Road, Reg. 8662.

Form.—Acne Rosacea of Acne indurata, of seven years duration, nearly well.

Habit.—Drinks a little beer with dinner, left it off for five months by medical advice when the complaint became much worse—"face not fit to b seen,"—now better.

CASE 4.—Mary Tibbs, aged 22, 15, Thomas-street, Bethnal-green; second application to the Institution. Reg. 9059.

Form.—Acne Pustulosa, "two years duration; applied some months ago, and got well; re-appeared this hot weather." Eruption very slight.

Habit.—Drinks quarter of a pint of beer per day. "No spirits."

CASE 5.—Mary Conder, aged 22, of No. 4, Lees buildings, Fetter-lane. Reg. 9063.

Form.—Acne Simplex indurata; rather severe case; some years duration.

Habit.—"Very poor; does not drink a pint of beer a week;" "can't get it."

CASE. 6.—Jane Enderson, aged 21, No. 8, Church-street, Blackfriars-road. Reg. 8868.

Form.—Acne Simplex inveterata, two years duration. Improving.

Habit.—"Drinks half a pint of beer twice a day. Married and suckling, and cannot do without it."

CASE 7.—George Cane, aged 16, of 43, Kingsland-road. Registered.

Form.—Acne Punctata. Two years duration.

Habit.—"Takes a pint of beer daily; ordered to discontinue by me. Rather worse since."

CASE 8.—James Charles, aged 28, Churchway-street, St. Pancras. Reg. 8671.

Form.—Acne Rosacea inveterata of seven years standing. Very severe case, so as to prevent his obtaining employment.

Habit.—Habitually drank two pints of beer daily since attendance here. Has taken two glasses of warm gin and water per day, and is now well.

CASE 9.—Harriet Pritchard, aged 34, No. 3, Kent-place. Reg. 8028.

Form.—Acne Rosacea; seven years duration; severe. This day discharged, cured.

Habit.—"Does not like beer; half a pint will serve three days, but has taken more lately instead of gin and water, as advised. Formerly drank *vin ordinaire* freely, when residing in France."

CASE 10.—Elizabeth Trevener, aged 34, of No. 5, Queen's-terrace. Reg. 8125.

Form.—Acne Indurata et Rosacea of ten years standing.

Habit.—"Used to drink beer; then left it off; became worse; now drinks gin and water, and is getting well."

CASE 11.—Anna Armes, aged 22, 5, New-road, Sloane-street. Reg. 8388.

Form.—Acne Punctata; four years.

Habit.—Never drinks beer; only tea and coffee; has lately taken gin and water, and this day is discharged, cured.

CASE 12.—Adelaide Benjamin, aged 23, No. 163, White Cross-street. Reg. 8790.

Form.—Acne Indurata et Rosacea; two years standing; now convalescent.

Habit.—"About a pint of beer a week is as much as she ever takes; as she does not take it now, drinks gin and water."

CASE 13.—Caroline Short, aged 22, of 87, Hare-street. Reg. 8852.

Form.—Acne Punctata et Rosacea; one year standing, but now well.

Habit.—"Has drunk one pint of beer daily."

The above thirteen cases, it is believed, will speak for themselves, as regards the point under discussion; and, perchance, demonstrate that in acneous disorders "a little wine for the stomach's sake" may be found useful.

I am, dear Sir,
Your faithful servant,
JAMES STARTIN.

PHYSICIANS AND GENERAL PRACTITIONERS.

[To the Editor of the Medical Times.]

SIR,—Poor Dr. David Bell has received so severe a castigation, at the hands of your correspondent "Crito," in the last week's *Medical Times*, that I ought not in mercy to add to his torture; but I cannot refrain from making an additional remark or two.

The doctor is evidently upon the wrong tack—for he insists that the acquirement of the physician, both general and special, *ought* to be greater than those of the general practitioner—and he would bring about this state of things—not by elevating the standard of the physician's education, but by depressing that of the general practitioner. Now, there's the rub—the education of the general practitioner of late years has progressed in a higher proportion than that of the physicians, consequently consulting practice is at a tremendous discount.

The doctor is aware of this fact, and therefore discountenances the use of the university degree of Doctor of Medicine—and its title, if obtained by a general practitioner—as if the *only distinction* between the two grades of practitioners resided in the empty title.

It appears to me, Sir, that any one who ever obtains a degree has a right to the title of it—whatever may be his mode of practice—and whether he practise his profession, or not. In fact you cannot deprive him of it—do what you will. A doctor is a doctor, whether he be M.D., D.D., L.L.D., D.C.H., or Ph.D., and it would be as erroneous to call a man possessing either of these degrees *Mr.*, as it would be to apply the prefix *Dr.* to a man having no degree at all.

The physician complains that the use of the title, five general practitioners out of six possessing the Doctorate, does away with the only public distinction between the pure physician and the man in general practice; the consulting surgeon would have the same reason to complain of the use of the term "Surgeon," by the general practitioner; but the mode of practice of each grade is known in each locality, and that is sufficient.

The doctor dabs on a little "soft soap," and shows a desire to keep in with the few general practitioners who may occasionally call him in—but throughout his letter there is an appearance

of antipathy to the class—very evident to the most superficial observer. His jeering at the Apothecaries' Company and the national Association comes with very bad grace at this particular crisis—and shows the animus which dictated the first attempt at medical legislation some two years ago.

It is but too evident that the general practitioners must look after themselves, and the only practicable mode is the establishment of the National Institute. The eyes of the medical world are directed with intense interest upon the important proceedings of the next week,—a combination of zeal, unanimity and prudence on the part of the first officers of the new Institute will place the entire class of general practitioners in an unprecedented position of importance and influence. I am Sir, your most obedient Servant

August. 5th. 1846. CHIRURGUS.

EXAMINATION OF THE UNIVERSITY OF LONDON.

(M.B.—FIRST EXAMINATION.)

Monday, August 3rd, Morning 10 to 1.

ANATOMY AND PHYSIOLOGY. — *Examiners* Mr. KIERNAN and Professor SHARPEY.—1. Describe that portion of the side and basis of the skull, which is bounded in front by the orbital process of the frontal bone and by the posterior surface of the malar bone; behind by a vertical line passing behind the mastoid process to the posterior part of the condyle of the occipital superiorly by a horizontal line passing over the squamous suture, and internally by the mesial line. Commence the description at the upper limit, and mention the parts in the order in which they are seen in proceeding towards the mesial line.

2. Give an account of the articulations of the scapula with the clavicle and humerus, describing the articular surfaces, the ligaments, the synovial membranes and the articular cartilages, and the proper ligaments of the Scapula. Describe the movements which take place in these joints, and also those of the sterno-clavicular articulation, mentioning the muscles by which they are severally effected.

3. Give the anatomy of the rectum; describing the structure, form and situation of the intestine, its blood-vessels and nerves, and its relations to the peritoneum and to other adjacent parts of the two sexes.

4. Give an account of the popliteal region, describing its form and boundaries, and the parts contained in it, commencing the dissection at the skin and carrying it to the bones.

5. Commencing at the integuments state the dissection required to show the course of the Radial Artery from its origin at the bend of the elbow to the termination of the deep palmar arch. Describe the relations of the artery to other structures in the different parts of its course and mention the branches in the order in which they arise, but describing the course of those branches only which are necessarily seen in the steps of the dissection required to expose the main artery.

Afternoon, 3 to 6.

1. Describe the intrinsic muscles of the larynx, mentioning their actions and explaining the chief uses to which they are subservient. Describe also the distribution of the Laryngeal nerves, and state what are believed to be their respective functions.

2. Describe the parts met with in d[illegible]ing the branches of the portio dura of the seventh pair of nerves after they have emerged from the parotid gland.

3. State the dissection required [illegible] the interior of the abdomen the course of [illegible] epigastric artery, the former from its origin to its entrance into the crural or foramen, the [illegible] as far as the point where it becomes concealed by the sheath of the rectus muscle. Describe the parts brought into view in the dissection, the chief variations to which the vessels in question are subject, and the relations of these vessels to the inguinal and crural apertures.

4. Give a description of the dura mater; including its intimate structure, its extent and connexions in the cranium and vertebral canal, its relations to the cranial and spinal nerves, the arteries which supply the membrane with blood, and the venous sinuses contained in it.

5. Describe the structure and connexions of the tongue, and the blood-vessels and nerves distributed to it. Enumerate its principal movements and the muscles producing them, and state what are the most probable functions of its different nerves.

6. Give an account of the system of lymphatic vessels, describing their structure, and that of a lymphatic vessel, their mode of origin, general course and termination.

Tuesday, August 4, Morning 10 to 1.

CHEMISTRY.—*Examiner* Professor BRANDE.—1. What are the general effects of heat upon the different forms of matter? how are these effects theoretically explained? What are their principal influences in nature? State the different ways in which heat is propagated through solid, liquid and aeriform bodies.

2. A spring water contains free carbonic acid carbonate and sulphate of lime, chloride of sodium and carbonate of soda. How would you ascertain the presence of these substances and determine their respective quantities?

3. What is the atomic constitution of alcohol and of ether? How is ether usually obtained and what are the phenomena attendant upon its production?

4. In the analysis of an alloy of equal parts of lead, tin, bismuth, and copper, how would you separate the component metals and determine their respective quantities?

5. What are the leading proximate constituents of the blood? how are they chemically distinguished and separately obtained?

6. The bottles marked A and B contain saline solutions; they are accompanied by appropriate tests by which their respective bases and acids may be recognised; you are requested to name these, and to write their respective symbols and equivalents.

Afternoon 3 to 6.

MATERIA MEDICA AND PHARMACY.—*Examiner*, Dr. PEREIRA. — 1. Describe the *Papaver somniferum* botanically, the method of preparing Opium, and the process given in the London Pharmacopœia for the preparation of *Morphiæ Hydrochloras*. Enumerate the peculiar proximate principles which have been obtained from Opium; and mention the chemical characters by which Morphia, Narcotina, and Meconic Acid are respectively distinguished. State the indications, and contra-indications for the use of Opium, and the dose of this drug, as well as of Morphia.

2. Describe the method of preparing *Vinum Colchici*, the properties and composition of antimonial wine, the changes which it undergoes by exposure to the air, and its dose and uses.

3. How are the presence of nitric acid in acetic acid; of iron in sulphate of copper, and of carbonate of potash in iodide of potassium to be respectively ascertained?

4. Enumerate the most important officinal narcotics and explain their respective peculiarities of operation.

5. What are the doses of Strychnia, Veratria, Conium, Biniodide of Mercury, and Iodide of Lead?

BOTANY.—*Examiner*, Rev. Professor HENSLOW.—1. Define, and give examples [illegible] the [illegible] [illegible] the following terms:—Amentum — Corymbus — Hypanthium — Pedunculus — [illegible] — Vitta.

2. Give diagnoses of the following Orders:—[illegible] — Solanaceæ — Colchicaceæ.

3. What are the more important characters in the following genera:—Papaver, Centaurea, Polemonium; Crocus? Describe particularly the characters of the several floral whorls, fruit, seed, vernation and æstivation.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL, July 29th.—John Renwick, George Charles Stacpoole, John Charles Collins, George Henry Jenkins.

THE QUEEN'S COLLEGE AT BIRMINGHAM.—The Queen has been graciously pleased to issue her Majesty's warrant, under the sign manual, "to authorise the right trusty and well-beloved the Principal, and the trusty and well-beloved the Vice-Principal, of Queen's College at Birmingham, to issue to such persons as may be desirous of becoming candidates for the respective degrees of Bachelor of Arts, Master of Arts, Bachelor of Laws, or Doctor of Laws, to be conferred by the University of London, certificates to the effect that such candidates have completed the course of instruction which the Chancellor, Vice-Chancellor, and Fellows of the said University of London, by regulation in that behalf, shall have determined." The Council of the college, at their last monthly board, have unanimously elected the Rev. G. Richards, B.A., Pembroke College, Oxon., resident Classical Tutor and Chaplain of the college; the Rev. J. Taylor, B.A., St. John's Coll., Cantab., resident Mathematical Tutor and Chaplain of the College Hospital; Herr J. Mayland, German Master; Jean J. O Flannagan, French Master; and Chas. Docher, Esq., Drawing Master. The first and second years' students in the Classical Department will reside with the Rev. J. O. Welstead, after which they will reside in college to complete their medical studies.

ROYAL COLLEGE OF SURGEONS, *July 31st.*—Gentlemen admitted members: Messrs. C. H. Hallett, T. Webster, E. S. Guest, R. T. Martland, J. E. Scott, and J. G. Pasquin. *Aug. 3rd.*—Messrs. P. E. Meggs, H. Cresswell, J. Goodchild, J. Williams, H. Wellings, S. L. Gill, W. T. Cleveland, T. J. Barnes, R. W. Baxter, W. J. Kite, and T. Hopgood.

OBITUARY. At Carlisle, on the 18th ult., aged 41, Richard James, Esq., M.D., second son of the late John James, Esq., surgeon. At Stockton-on-Tees, on the 19th ult., Mr. William Milburn, surgeon. At his residence, King's-square, Bristol, on the 21st ult., James Frowse, Esq., surgeon, aged 54.

The Chemist Rowe, who was indicted for the manslaughter of Elizabeth Munro a short time since at Plymouth, has been tried at the recent assizes at Exeter and acquitted. The particulars of the case will be found in a recent number of the *Medical Times*. No new facts appeared on the trial.

MORTALITY TABLE.

For the Week ending Saturday, August. 1, 1846.

Causes of Death.	Total.	Average of 5 summers.	Average of 5 years
ALL CAUSES	1086		968
SPECIFIED CAUSES	1083	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	329	201	
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	119	99	104
Diseases of the Brain, Spinal Marrow, Nerves and Senses	152	155	157
Diseases of the Lungs, and of the other Organs of Respiration	233	227	294
Diseases of the Heart & Blood-vessels	29	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	111	87	72
Diseases of the Kidneys, &c.	9	6	7
Childbirth, Diseases of the Uterus, &c.	19		10
Rheumatism, Diseases of the bones, Joints, &c.			7
Diseases of the Skin, Cellular Tissue, &c.	1	1	2
Old Age	51	52	67
Violence, Privation, Cold and Intemperance	24		26

No. 359. **SUMMARY.** August 15.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meetings of July 27, and August 3, 1846; M. BRONGNIART, V.P., in the Chair.

PRESENCE OF SUGAR IN THE BLOOD.—M. Magendie read a paper in which he endeavoured to prove that free sugar is contained in the blood. The method adopted by the learned physiologist for the demonstration of its presence consisted in the introduction of *starch* into the circulation. The facility with which this substance is changed into sugar must still leave the question in doubt, in spite of the assertions of the professor.

DIGESTION AND ASSIMILATION OF ALBUMINOID SUBSTANCES; by M. Mialhe.—It is only within a very few years that the gastric juice has been the object of experimental inquiry, and its precise function is not yet positively ascertained. Many still adopting Vanhelmont's theory of fermentation, still believe the gastric juice to be a universal solvent, whilst others deprive it, on the contrary, of all fluidifying power. The gastric juice is composed of two chemical elements: one is acid, the other a ferment. According to Berzelius, the acid portion is formed by a mixture of all the acids of the salts which have been detected in the juice. In the ferment four principles exist: pepsin, chymosin, gasterasis, and diastasis. The three first form only one substance; their chemical properties are the same; they should be confounded under one denomination—pepsin. This substance coagulates milk, fibrin, and gluten, but never exercises any saccharifying power on starch. This is its great difference from diastasis.

M. Mialhe proposes the following theory for the purpose of explaining the formation of chyme:—the acids produce a coagulum of a whitish colour on the surface of the alimentary bolus; and this coagulum the pepsin dissolves, and renders fit for assimilation. Thus, the stomach is not only a passage, but an organ of elaboration, in which the transformation into chyme is performed.

All albuminous substances, without any exception, are changed by pepsin into a compound always identical to itself, which M. Mialhe calls albuminosis. This body is solid, white, soluble in water, but not in spirit: heat, acids, alcalies, or pepsin produce no precipitate in its solution, but a deposit is caused by the addition of many metallic salts. Alone albuminosis is susceptible of assimilation; pure albumen introduced into the veins passes unaltered through the kidneys; and fibrin, when not modified by pepsin, causes instantaneous death from obstruction of the pulmonary circulation.

COFFEE; by M. Payen.—We forwarded on a former occasion to the readers of the *Medical Times* an account of M. Payen's first researches on coffee. This distinguished chemist guided entirely by theoretical views, and finding in coffee a large amount of nitrogen, boldly pronounced that fluid to be endowed with highly nutritive properties. The learned writer had perhaps not sufficiently considered the physiological part of the subject. It does not seem to us that the single fact of the presence of nitrogen is sufficient to render any substance nutritious; the nitrogen must also be endowed with the power of being assimilable to the system, else urea, hartshorn, and prussic acid, which contain a much larger proportion of azote than coffee, would be still more nutritious articles of food, an opinion which even M. Payen would not be disposed to admit without some reserve.

In his second communication, M. Payen states that he has detected in coffee a new crystallisable acid, and a double salt. The acid he calls *chloroginic*. Its composition is the following:—carbon 56, hydrogen 5 6, and oxygen 38 4.

By the combination of this acid with potass and cafeine a double salt is produced, it boils at 185° cent., and is decomposed by a heat of 230°. The composition of the salt is, acid 64, potass 8, cafeine 30. Cafeine is formed of C^{16}, H^{10}, Az, $O3$, As to the aroma of the liquid, it appears to be due to two essential oils contained in the coffee and liberated by mild torrefaction.

ACADEMY OF MEDICINE.

Meeting of August 4, 1846; M. ROCHE in the Chair.

THE PLAGUE.

The debate on this interminable question still continues at the Academy. No new facts, however, were brought forward in the long speeches of Prof. Adelon or M. Rochoux, nor in the answers of M. Prus. The debate was adjourned to the next meeting.

THE SPAS OF THE RHINE,
By Prof. Trousseau and Dr. Lassaigne.
(Continued from page 324.)

Hypochondriasis.—We have here the "bonâ fide" disease, which is to be met with at every spa, as inseparable from the mineral wells, as their advertising pamphlets and Sunday concerts. At Hombourg, and at Nanheim, at Soden, and at Kreutznach does hypochondriasis take up its summer quarters; and wherever it can find a sufficiency of acidulated waters, and of chloride of sodium. The ancient physicians made it a precept to study acute disorders during the progress of great epidemics, the frequency of the cases rendering more obvious their differences and their analogies. The same advantage in the observation of chronic diseases is to be met with at the spas; but it is not sufficient that a common feeling of hope should congregate patients around the wells, curious observers must also resort to the spot, willing to take the trouble, or rejoicing in sufficient leisure, to collect the melancholy treasures of knowledge. The resident physicians have something else to gather besides pathological information; in their eyes the disease is naught, considered independently of its treatment. They know nothing of gout and gravel; they know only of waters curing gravel and gout.

Unsolicited by the same interests, we may profit by the great opportunities afforded us, certain that the subject will amply repay the labour of investigation. However long may be dissertations on chronic maladies, they will almost unavoidably be found too short. Some of their thousand shapes and varieties are inevitably omitted. Nothing is more difficult than a candid and scientific appreciation of mineral waters by a writer who has not visited them; indeed, we may consider the task to be beyond the powers of the most distinguished authors; on the other hand, those from whom we generally derive our knowledge of their virtues have always present to their minds the success of their own particular spa, and the practitioners who prescribe the waters only consider the patients; the spa is always chosen for the disease, never the disease for the spa. Thus, insisting chiefly upon pathological detail—looking upon maladies not in the light of accessories, but as the principal part of our subject—we will follow the same logical order of ideas as the physicians, for whose perusal these pages are chiefly intended. Perhaps we may be in contradiction with many ideas circulated by the physicians of the spas, it is to us of little import; it is not our object to afford any information to the directors of mineral wells.

In Germany every one believes in, nay every one explains, hypochondriasis. In France, the very existence of the disease is doubted by many, and the recitals of hypochondriasis are often taken for the vagaries of disordered imaginations, or for the premonitory signs of some serious organic lesion. Let unbelievers travel as far as Hombourg—let them visit the banks of the Rhine—and they will return with a full conviction of the truth of those opinions they now call in question.

The nature of this singular disease readily accounts for hesitation and doubt. Hypochondriasis is not a malady like pneumonia, but a morbid condition, in which all the viscera take share, and which borrows a different character from each of its influences. Its isolated symptoms are of no value, but, when united, they form an amount of suffering which may, if neglected, end in some incurable lesion. Hypochondriacal symptoms are eminently transitory, and introduce better defined morbid manifestations. In one you will observe incipient asthma; in another, the first indications of chronic dyspepsia; a third is affected with piles; a fourth is troubled with gout or hemicrania; but cast one glance on the "*tout ensemble*" and you cannot fail to discover that these apparently divergent roads start from *one* spot; in medical language, the

disease presents common symptoms in separate forms.

The leading feature of hypochondriasis is its origin from abdominal derangement; another, is its tendency to produce erratic symptoms. The patient complains of dull abdominal pain, of vague sensations of uneasiness towards which he always looks back as the source of all his sufferings. If these manifestations be accompanied with any physical signs, distention of the stomach, flatulency, &c., are observed from the beginning. In a word, and the remark is not a new one, hypochondriasis does not exist, if the disease does not first occupy the hypochondria.

Chronic enteritis, obstinate diarrhœa, rebellious vomiting, must not be confounded with the malady under consideration. Once cured by the benefit of art or of nature, no more notice need be taken of them; to the hypochondriac, on the contrary, no interval of health can give the certainty that the cure will be permanent. Months may elapse in apparent health, when suddenly and without any visible cause, the symptoms return. This is not the result of mental pre-occupation, the patient had forgotten the disease; it is the disease which forces itself upon his memory.

Together with abdominal pain, melancholy pre-occupations return. They are not, as has been asserted, a form of mental aberration. Nosophobic patients, often cured with micæ panis pills, should not in any instance be confounded with hypochondriacs. Hypochondriasis is a special malady, marked by three distinct characters, abdominal derangement, erratic symptoms, and mental perturbation. Have its anatomical lesions ever been detected by the dissector? Germans say yes; most French physicians will answer no. Even for those who do not in these matters adopt the views of our German neighbours, it is necessary to have them present to the mind, in order to make a profitable visit to the spas. Pamphlets are every day circulated for the purpose of informing the world of the numerous advantages of the Hombourg hotels and tables d'hote; it surely is not very injurious once, by accident, to endeavour to spread amongst the medical public the local scientific doctrines.

The Germans have preserved in their integrity the opinions of Stahl and Fr. Hoffman on chronic diseases. These two great masters professed that hypochondriasis arose from a primary derangement of the circulation. They supposed that the blood equally divided between the viscera, was either continuously or at irregular intervals carried in excess towards the abdominal organs; hence the various symptoms of what has been called abdominal plethora. When the local circulation merely undergoes an increase of activity, no chronic inflammation can arise, but this derangement of equilibrium in what Puchelt calls *arterial* subjects (Syst. of Med. Heidelb. 1827), constitutes a predisposition to acute inflammation. Insufficiency of the venous circulation, on the contrary, promotes passive congestions, and that form of disease vaguely denominated obstruction by old writers.

This sluggishness of the abdominal veins is explained and encouraged by the anatomical disposition of the portal system, by the presence of permeable conglobate glands, and the vascular structure of the mesentery. The best demonstration of medical facts may be obtained by a method much in use amongst mathematicians; let us for an instant consider as proved this hypothesis of venous sluggishness, and see if it can account for the symptoms observed.

Venous abdominal congestion may result from one of two causes, a lax habit of the constitution, or any local constriction of the body, by which a portion of the circulating fluid is mechanically poured into those parts best calculated for its reception. Hypochondriasis belongs to the second order of causes, an opinion which seems confirmed by the metastatic changes observed in its symptoms. These are referred by persons accustomed to the study of insanity, to moral pre-occupation; and, by the sectarians of the school of Haller, to disturbed equilibrium of the circulation; two opinions between which we would feel no embarrassment in making a choice. Follow the progress of the symptoms:—the patient at first complains of vague and erratic pains, of a sensation of weight, but of no functional disturbance. Pain is already present, but digestion is regular, and the activity of the system is preserved. Dyspeptic symptoms make their appearance, and a gastric affection might be diagnosed, but that the hypochondria and the lower region of the abdomen are alone the seat of pain; flatulency and costiveness are soon noticed, together with the inseparable companions of the latter, fatigue of the extremities, headache, and mental lassitude. The patient becomes alarmed; he had been hitherto pre-occupied, he now is seriously uneasy. When questioned on his ailments, he loses his habitual taciturnity, and the narratives of all hypochondriacs present a character of sameness which must strike even an inattentive observer. Such is the first stage; it is seldom studied, because the patient has not yet thought it necessary to seek professional assistance, which at this period might be effective. Repeated laxatives are almost constantly successful, and it is in such cases that we have found the waters of the Source Elizabeth, at Hambourg, of the greatest possible benefit.

At a more advanced period, the symptoms still referred to the abdomen have acquired a greater degree of intensity; deep-seated colic, analogous to that which precedes menstruation, throbbing in the side, abdominal distension, occasionally so intense as to occasion dyspnœa, loss of appetite, appear together; the attacks last one or two days, and are followed by comparative healthy; flatulency and costiveness become the leading symptoms, and the excretion of urine is attended with slight pain.

DAN. M'CARTHY, D.M.P.

Germany.

EGYPTIAN OPHTHALMIA OCCURRING IN THE AUSTRIAN GARRISON OF MAYENCE.—Dr. Muller of Mayence has published a paper in the *Zeitschrift fur die Gesammte Medicin* on a form of Egyptian ophthalmia which he has lately observed among the Austrian garrison of Mayence. The disease commenced under the following circumstances. In the autumn of 1845 a camp, in which the troops were changed every eight days, was established about half a league from the town. The exercises, which were carried on during the day, took place on very sandy ground, and the soldiers passed the night in little tents containing about eight men each. They lay on the ground on straw with their cloaks and blankets. The heat, in consequence of crowding, was so great that the men were often obliged to undress themselves. Notwithstanding this, a few cases of rheumatism, and diarrhœa excepted, the general state of the camp, after it had been established some weeks, was very satisfactory. The soldiers' diet was the same as usual, although perhaps they drank more brandy than usual; excesses however when discovered were severely punished.

In 1818 a very severe epidemic of the Egyptian form of ophthalmia appeared in the Prussian garrison of Mayence, and from that period occasional sporadic cases of the disease had been seen, but never among the Austrian soldiers. Attacks of ophthalmia, which were at first supposed to be rheumatic but which were soon found to be slight forms of Egyptian ophthalmia, having then been found to exist in the camp, it was immediately broken up. On the 20th of September 1845, five weeks after the establishment of the camp, symptoms of Egyptian ophthalmia were remarked. The soldiers first attacked had only a slight inflammation of the conjunctiva; but at the external angle of the lower eyelid, just towards its centre, rounded phlyctenæ were observed, like the blisters of typhus; there was neither photophobia true inflammation, fever, nor any other functional disorder: in a few cases only the patients complained of a feeling of irritation and of seeing colours round the flame of a candle. The first day the number of sick amounted to 100, and at the end of the week 1000 men were attacked,—a quarter of the whole Austrian garrison. Recourse was immediately had to cauterisation with nitrate of silver, which had been regarded as a specific by the Prussian garrison in their attacks of the complaint. On the 28th of September, the 8th day of the epidemic, Dr Esihler, the surgeon general, showed the author of the paper a hundred patients, ten of whom had been recently attacked, and the remainder of whom had been cauterised. The following symptoms were observed among the ten recently attacked in whom no treatment had been practised. Look free; the globe of the eye clear and not more moist than natural, the eyelids neither swollen nor red, without lachrymation or increased flow of mucus; on depressing the inferior palpebra several phlyctenæ were seen in the external angle, in the commissure of the ocular and palpebral conjunctivæ; one of these was usually placed higher than the others, isolated, and was generally the first to appear and the most developed; by degrees the vesicles extended towards the middle of the eyelid and covered almost all its internal surface; in other cases the greater part of the surface remained unaffected, and a chain of vesicles only existed on a projecting fold of the conjunctiva. The more recent phlyctenæ were small, diaphanous, hemispherical, of the size of a millet seed or rather less. The conjunctiva was at the commencement of the disease marked by several small vessels; but by the second or third day it became of a brighter colour, sometimes purplish and covered by numerous papulæ. The folds of the lachrymal caruncle and of the conjunctiva always remained in a normal condition, the ocular conjunctiva being always clear; the ends of the vessels, from the palpebral conjunctiva, were sometimes only seen to ramify in it, but they never reached as far as the cornea, which was always clear and transparent. The upper eyelid, the lachrymal gland, the lachrymal canals, and the glands of meibomius were not affected by the disease, except by a slight increase of their secretion, which continued altered in quality.

In the eyes which had been cauterised, the eyelids were more or less swollen, and the conjunctiva covered by white scars, after the detachment of which little pointed papillæ were seen, which covered the whole conjunctival surface of the lid by degrees, and gave it the appearance of velvet, furrowed by more or less voluminous vessels. The ocular conjunctiva and the sclerotica appeared irritated after the cauterisation, which was occasionally repeated in order to repress too high granulations.

The Prussian hospital contained thirty-five soldiers affected by ophthalmia, out of 1360 Prussians composing the camp. This ophthalmia differed considerably from that affecting the Austrians. The lids were swollen, the conjunctivæ of the inferior lid and of the globe of the eye were highly injected, swollen, covered by granulations, folded and moveable. At the external angle of the eye there were found several little sacs; the caruncula lachrymalis and the semilunar fold were red, injected, and swollen; the secretion of the tears was slightly increased, and their discharge easy; and the meibomian glands discharged a good deal of pus. At the commencement of the disease the soldiers experienced a good deal of itching in the eye, dazzling and slight insufferance of light. This was the state on the second day. After a few days the use of fomentations, with a strong solution of nitrate of silver, and friction with mercurial ointment in the supra-orbitar region, there was a considerable diminution in the mucous secretion, in the swelling of the lids, and in the conjunctival granulations. By the fifth or sixth day of treatment the granulations had almost entirely disappeared. Still, however, the conjunctiva preserved a velvety appearance, and a redder purplish tint than natural, which extended to the globe of the eye. The treatment described, continued during ten or twelve days, succeeded perfectly without any derangement in the func-

tions of the eye. In the most serious cases with more prominent granulations, recourse was had with success to the use of the nitrate of silver in substance. Bleeding was never employed in the worst cases. M. Bock, the surgeon of the Prussian garrison, administered tartar emetic in somewhat large doses, and caused a concentrated solution of nitrate of silver to be dropped into the eye every two hours, at the same time carefully removing the little concreted masses of mucus. If considerable chemosis took place, he removed the swollen conjunctiva by means of scissors, and then applied the nitrate of silver in substance.

The causes to which this epidemic was attributable were, the chills taken during the night by sleeping on the ground in confined tents; the effects of the dust and of the very bright sunshine reflected by an immense sandy plain; perhaps also the excessive use of brandy. The phlyctena eruption was the characteristic mark of this epidemic; all the other symptoms, such as inflammation and discharge, being only consecutive. The author of the paper regards the opthalmia, observed in the Austrian garrison, as a more benign form of the same disease which raged among the Prussian soldiers. The disease could be communicated by contact.

RESULTS OF AUSCULTATION AT A TRIPLE BIRTH.—Professor Naegele, jun. has published the following interesting account of a case of triplets in the *Medicinische Annalen*. The woman was a primipara, aged thirty-two. At the moment when her labour commenced, auscultation was used, and the double tick of a fœtal heart, with the simple *bruit de souffle* of a cord was heard in the left hypogastric region. The same phenomena were present in the right hypogastric region together with other double sounds. Two auscultators applied the stethoscope, one on the right, the other on the left side of the woman, they noticed that the fœtal pulsations were more frequent on the right side than on the left, in the proportion of thirty-eight to thirty-six, in the quarter of a minute. Soon after, when the right fœtus moved forty pulsations in the quarter of a minute were counted for its heart, thirty-six for that of the fœtus on the left side, making thus a difference of sixteen pulsations in the minute between the two infants. After the birth of the first child with the aid of the forceps, the mother was examined again with the stethoscope, and the pulsations of two fœtal hearts were still heard distinctly of which one was situated in the left hypochondrium, and the other in the right umbilical region. The head of the second child presented in the second position, and the pulsation heard to the right belonged to this child, which was also delivered by the forceps. After the birth of this child, the pulsation of a third fœtal heart was still heard distinctly, and this child was born by the unaided efforts of nature. The entire duration of the labour was fifty-seven hours. The first diagnosis given was, that there was more than one child in the uterus and was founded on the distinct hearing the pulsation of two fœtal hearts. It was only by auscultating after the birth of the first child, when double pulsation was again heard clearly and distinctly, that it became possible to ascertain the existence of three infants. The pulsation of the third fœtal heart was not heard at the commencement of labour, because the infant was most likely situated behind the others towards the spine of the female. The uterine bruit de souffle was neither louder nor more extensive than usual, and could not cause the presence of the placenta to be suspected.

A CASE OF POISONING BY NITRIC ACID, IN WHICH THE MUCOUS MEMBRANE OF THE STOMACH SLOUGHED AND WAS DISCHARGED BY VOMITING.—Professor Puchelt relates in the same journal the following highly interesting and very uncommon case. Caspar R——, a locksmith, much addicted to drunkenness and living in misery, swallowed on the 19th of May, 1845, about two hours after dinner, at which he had eaten some cheese, two ounces of nitric acid. He was immediately seized by violent pain in the mouth, pharynx, and œsophagus, and vomited frequently so that he threw up the greater part of the acid It was not until the 21st of May, 36 hours after the poisoning, that M. Puchelt saw him at the hospital, up to which period he had only received an oily emulsion. The buccal and pharyngeal mucous membranes were covered by shreds of white membrane already partly detached. The velum pendulum palati and the tonsils were swollen, painful, and injected; around the mouth there existed some yellow spots, caused by the action of the caustic on the epidermis: the patient was only able to swallow liquids, his respiration was difficult, but the epigastrium was not very painful; the muscles of the anterior abdominal wall were so contracted that they approached the vertebral column The pulse was small and tranquil, and the intellectual faculties unaltered the urine and stools were normal, and his general state did not seem very alarming; leeches were applied to the epigastrium, and an oily emulsion administered with sugar and water for drink, and gargles of warm water. The symptoms continued much the same for several days, the epigastric pains becoming worse from time to time. Leeches were applied several times, fomentations of chamomile were employed and demulcents administered. On the eighth day the mouth and throat were so easy, that the patient felt an appetite and even ate some food, still however his strength diminished, his appearance became unfavourable, and on the third of June he vomited several times. On the fourth he passed a little blood with his stools; during the night of the fifth he experienced very severe pain in the epigastrium, with anxiety, fainting fits, nausea, and even violent vomitings containing black, fluid blood, and a membrane a foot in diameter rotten and black, as if burnt in some places, and having several holes in it of greater or less size, giving off a gangrenous odour; this membrane enclosed vessels of considerable size with their ramifications; its structure was fibrous, and it possessed very little epithelium. The patient had after this vomiting a stool containing much black and putrid blood, he became very weak and depressed in spirits, and often spoke of death; his pulse was small and frequent: he had acute pain in the epigastrium, increased by pressure, and complete insomnia. An opiate emulsion was administered with slight relief and broth and milk were ordered On the eighth, in the morning, more vomitings took place, with stools of black and fluid blood; the whole body gave off an insupportable smell, the extremities were cold and the pulse small and very frequent; the eyes glassy; delirium from time to time, and afterwards a recurrence of the vomiting of blood. Death took place on the tenth twenty three days after the acid had been swallowed, and sixty-six hours after the discharge of the membranes of the stomach. At the post-mortem examination, the dura mater and its sinuses, were found natural; the arachnoid whitish, opaque, and containing a little fluid, the brain normal; the ventricles containing a good deal of serum; the lungs emphysematous in several places especially towards the right side, a few tubercles at the upper parts of the lungs; adhesions of the pleura on the left side; heart normal, loaded with fat, and the left ventricle and the aorta containing blood. In the abdomen, the left lobe of the liver advanced so far that it covered the stomach and the transverse arch of the colon, to which it was adherent; no effusion in the peritoneum. After having detached the left lobe of the liver with the colon to which it adhered, a cavity was entered which replaced that of the stomach. This cavity extended from the œsophagus as far as the duodenum, into the openings of each of which the finger could be inserted; the walls of this cavity were formed, in front by the concave surface of the liver and the transverse colon, and below by the remains of the membranes of the stomach; behind by the membranes of the stomach, grangrenous, and in a state of putrefaction; to the left by the spleen and a small remaining portion of the walls of the stomach. There was then absence of the anterior wall of the stomach, of the smaller curvature and of a portion of its superior wall. The matters contained in the stomach, were kept in place by the other organs. The liver and the transverse arch of the colon were attached strongly together as far as the pylorus by exudation of lymph, and thus replaced the anterior wall of the stomach; the surface of the liver was covered by a pultaceous dirty fœtid mass of a blackish green colour; a similar mass was found in the cavity of the stomach; the serous covering of the liver was uninjured, and under it no vestiges of the membranes of the stomach were to be found. For the rest the liver itself was healthy enough, and neither much nor little injected; and the gall bladder normal. In the neighbourhood of the pylorus, the portion of the walls of the stomach which remained, was full of holes through which a sound could be passed as far as the walls of the transverse arch of the colon. What remained of the base of the stomach, was so soft that it tore on the least traction, and was adherent to the spleen and diaphragm. The serous membrane of the spleen was uninjured, but thicker than natural. The duodenum and the other intestines were normal but contained, especially the transverse arch of the colon, a considerable quantity of coagulated blood. The œsophagus was completely stripped of its mucous membrane, and the naked muscular fibre was in some places red, in others, black. Neither contractions nor perforations were discovered in the tube. The papillæ of the tongue, strongly projecting were covered by effusion. The bladder and kidneys were normal, the latter being covered by a good deal of fat. This case is interesting inasmuch as it shows that, as assumed by Majendie, vomiting may take place by the action of the diaphragm and abdominal muscles only. The stomach plainly could have no power to reject its own substance.

STATISTICS OF PNEUMONIA AND PLEURISY. Dr. Hauff of Kercheim, in the *Medicinisches Correspondenzblatt*, gives the following statistics of pleurisy and pneumonia. Out of seven thousand eight hundred patients, M. Hauff has treated five hundred and eighty-five cases of pneumonia and pleurisy; of these two hundred and seventy-four occurred in men, and three hundred and eleven in women; thus according to M. Hauff's observations, and contrary to the generally received opinion, more women than men are affected by those diseases. The inverse proportion however took place during two years, whilst during two other years, the proportion of men attacked, was to the number of women as 1 to 1·15 and even of 1 to 1·85. The mortality following these two diseases appeared to be greater among men than among women. Of the two hundred and seventy-four men attacked, thirty-five died, and of the three hundred and eleven women, thirty-six died. The author thinks the greater rate of mortality among men to be due to their greater neglect in not applying early in the disease, and also that many of them were addicted to drunkenness. The general rate of mortality in pneumonia and pleurisy was 1 in 2[?] attacked.

ORIGINAL LECTURES.

A Course of Lectures on Hernia.

BY JOHN FLINT SOUTH, ESQ.,

Surgeon to St Thomas's Hospital, and Professor of Surgery to the Royal College of Surgeons

Delivered in the Theatre of the College, and revised by the Professor for the MEDICAL TIMES.)

(Continued from page 251.)

LECTURE 5.

I. PARTICULAR RUPTURES

1.—*Inguinal Ruptures*,

When complete pass through the external abdominal ring, and at their first protrusion through it, having the situation of bubo are sometimes called *Bubonocele*, but when in the male they descend into the scrotum they are named *Scrotal*; and when in the female, into the labium are

known as *Labial Ruptures*. *Inguinal Rupture* are of two sorts, which are named *Oblique* or *External* and *Direct* or *Internal*, according to the course they take in passing from the belly through the external ring, and their situation in regard to the epigastric artery.

a. Oblique or External Inguinal Ruptures.

Oblique Inguinal Rupture follows the course of the spermatic vessels in the male, and of the round ligament of the womb in the female, through the internal abdominal ring into the inguinal canal, where it may remain without passing further. It is then called an *Incomplete Inguinal Rupture* or *Rupture into the Inguinal canal.*

But most commonly it passes lower, through the external ring, and is then said to be a *complete Inguinal Rupture* whether it remains a little prominent, as a *Bubonocele*, or descends further into the scrotum or labium and becomes a *Scrotal or Labial Rupture.*

Whilst the Rupture remains in the inguinal canal and is an incomplete, or, as the French call it, an Interstitial rupture, as in the Prep. No. 1316. of the College Collection, in the male, and in Prep. No. 1317, in the female; it is covered by the skin, the cellular tissue, which throughout the body connects the skin with the parts beneath, but is here specially designated, superficial fascia, though in reality no tendinous expansion, by the tendon of the external oblique abdominal muscle, by the cremaster muscle, and the cellular tissue given off from the internal ring to the cord, to form its so called proper fascia. The lower edge of the internal oblique and transverse muscles does not cover it as by some stated, for almost immediately after the rupture bursts through the ring, the edges of these muscles slip up and remain above its neck. When the rupture continuing to descend has passed through the external ring, as in Prep. No. 1319. of the Coll. Mus. it is no longer covered by the tendon of the oblique muscle, but receives in its stead the cellular tissue given from the edge of that ring to the spermatic cord to complete the so called proper fascia of the cord, spreading on the cremaster and blending behind with that other portion which had been given from the internal ring to the spermatic vessels in their passage through it to the inguinal ring. These coverings are well seen in Prep. No. 1320 of the College Collection. Such are the coverings of the rupture sac in the male, but in the female as there is not any muscular expansion on the round ligament, corresponding to the cremaster, that covering is deficient in her, and hence, in woman, an incomplete rupture, as in Prep. No. 1317, is covered only by superficial fascia, by the tendon of the external oblique muscle, and by the cellular tissue, or so called fascia of the round ligament, and when it has passed through the external ring, by the superficial fascia and by the fascia of the cord which are blended together.

The peritoneum in this form of inguinal rupture, first pushes through the internal ring of the transversalis fascia, or cellular tissue connecting the abdominal muscles with the peritoneum, which is situated midway between the upper front iliac spine and the pubic symphisis, and about an inch and a half above the middle of Poupart's ligament, and this spot rather invites to protrusion, as there the process of peritoneum which has already taken the course which an oblique rupture follows, has closed up, leaving generally only a slight hollow, which may be seen by examining the inside of the peritoneum, but sometimes also a little distinct cavity in consequence of the peritoneal covering of the cord not having closed up completely to the inner ring. In some instances indeed the process of peritoneum which the testicle carries with it in its descent into the scrotum, and forming its vaginal tunic, never closes, but remains an open canal along the spermatic vessels to the testicle, so that the general cavity of the peritoneum, and the cavity of its process, the vaginal tunic, freely communicate, and thus a natural bag is formed into which the bowels can at once protrude without disturbing the peritoneum in the least, thus forming a *Congenital Inguinal Rupture* of which Preps. No. 1342—1343 of the College Collection are examples in different stages and the former is remarkable for the testicle being situated at the external ring. This differs from the common or acquired rupture at this part by descending into the open vaginal tunic, which becomes its peritoneal sac, and consequently the bowel under these circumstance is in distinct contact with the testicle and separated from it only by the close investing layer of the vaginal tunic the reflected portion of which forms the rupture ---.

When however, as in the ordinary condition of the parts, the cavity of the peritoneum is completely shut off from that of the vaginal tunic, by the perfect union of the peritoneum which has descended with the testicle, immediately above that gland so as to form its vaginal tunic below and at the internal abdominal ring above, still the intervening peritoneum which covers the spermatic vessels between the testicle and internal ring may be perceived, even in old persons, as a cellular thread, of which Cloquet has given a very good description. He also mentions several varieties which it presents either as a whitish filament which gradually thins and is soon lost in the cellular tissue of the spermatic vessels "on the front of which it always rests, or as a long, whitish, fibro cellular cord which may be followed down to the vaginal tunic, or instead of being full throughout its whole length it encloses here and there little oblong or spindle shaped cavities two or three in number, separated from each other by constrictions, but most commonly communicating with each other by very narrow passages, so that if one be inflated, the others distend like a row of beads." Oftentimes merely a simple cavity is found, an inch or an inch and a half long. The walls of such cavities are more or less delicate and transparent and somewhat elastic, or white, opaque, and easily torn; and their interior is bathed with a reddish serum which may increase in quantity and produce encysted hydrocele of the spermatic cord, "and even in regard to the cavity of the vaginal tunic which generally extends a little above the testicle he observes, I have very frequently noticed the vaginal tunic very much lengthened, ascend in front of the cord even within the vaginal canal, and connected with the depression in the peritoneum by a little band full of cellular tissue."

The rupture sac in oblique inguinal rupture following the course of the spermatic cord downwards, and inwards to the scrotum, and usually in front of the spermatic vessels, which are generally in this close neighbourhood to each other, but not always, as sometimes, though still behind the sac, the artery and vein are widely apart from each other, as in prep. No, 1325, of the college collection, or they may be completely split so that the artery and vein may be on the outer, and the vas deferens on the inner side of the sac, as in prep. No. 1288, of the St. Thomas's collection, or the vas deferens may still remain in its natural place behind, whilst the blood vessels are in front, as in prep. No. 1287, of St Thomas's Mus. These variations from the ordinary disposition of the spermatic vessels require attention, as if overlooked, they will be divided in opening the sac, when placed in front of it, which might be prevented merely by slipping them aside when brought into view.

As the rupture sac leaves the belly in oblique inguinal rupture by the internal abdominal ring it passes over, before and on the outer side of the epigastric artery, which in its passage from the external iliac artery inwards and upwards to the navel, crosses behind the neck of the sac, at right angles with it, and immediately on the inner edge of the internal ring. This is a most important circumstance in connexion with the division of the stricture in oblique inguinal rupture and necessarily forbids the cut for that purpose being made inwards.

b.—Direct or Internal Inguinal Rupture.

Direct inguinal rupture differs from oblique in not passing the inner ring, and along the inguinal canal, but at once though the external ring. The peritoneum as it lines the front and lower part of the muscular walls of the belly, presents a triangular fold, in which the umbilical ligament or remnant of the umbilical artery of the fœtus is enclosed, as it passes from the internal iliac artery up to the navel, and thus forms upon the front of the brim of the pelvis, and outwards to the upper front spine of the hipbone, two cavities, the outer one the larger, in which the internal ring, or rather the part opposite to that ring exists, and the inner smaller one behind the external ring and the part by which it is shut up; this smaller cavity or hollow, is separated from its fellow of the other side, by another fold of peritoneum in which is enclosed the ligament of the bladder, or so called urachus, as it passes from the bladder up to the navel. Thus as in oblique rupture, the little hollow where the peritoneum had passed with the testicle seemed to invite a protrusion of the bowels, so here another little hollow exists, which seems to favour the projection of a direct rupture, but as the external ring is more immediately and closely shut up than the internal, a rupture here is less frequent than through the internal ring. The shutting up of the external ring is effected by insertions of the conjoined tendons of the internal oblique and transversalis, which instead of being continued inwards towards the linea alba, on the same level as that part of their muscular edge, which does not descend on the spermatic cord to form the cremaster, dip down behind the external ring, and are attached to the pubic bone from its spine inwards, to its symphisis, so that when the cord enters the external ring, and is passing through, it has behind it these conjoined tendons, which are further strengthened by the inner attachment of the pubic portion of the transversalis fascia interposed between them and the peritoneum. Sometimes, as mentioned both by Sir Astley Cooper and Cloquet, the tendon of the transversalis muscle has not any attachment to the pubic bone, and under these circumstances the closure of the external ring is effected only by the transversalis fascia.

When a direct inguinal rupture is formed, the peritoneum is pushed out usually between the umbilical ligament, and the ligament of the bladder, and either thrusts before it the transversalis fascia and the conjoined tendons, or bursts through the latter, or if they have not any pubic attachment, pushes out the transversalis fascia alone directly through the external abdominal ring. As the rupture sac with these coverings passes further through the ring, it gets an additional covering, from that part of the fascia of the cord, originating from the margin of the ring, and blended with the superficial fascia, as it descends into the scrotum. Sir Astley Cooper says that the cremaster muscle does not afford it any covering, as in its continuing course it descends on the inside of the spermatic cord into the scrotum. But if my memory be correct, I think I recollect him to have mentioned in one of the last lectures I heard him deliver on this subject, that the rupture sac, bursting through the conjoined tendons, was covered on the inner side by the transversalis fascia, and on the outer by the cremaster muscle. And Mr. Lawrence states, that he has seen the cremaster muscle expanded over the swelling.

As this rupture does not pass through the inguinal canal, but directly through the external abdominal ring, it necessarily happens, that the epigastric artery is on the outer side of the mouth of the sac,—as exhibited in prep. No 1324 of the college collection, and No. 1209 of St. Thomas's museum—a circumstance of equal importance in reference to the division of the stricture, as its situation on the inner side of the sac's mouth in oblique rupture.

As to the possibility of distinguishing direct from oblique inguinal rupture when of long duration, I have great doubt, for where an oblique rupture has long existed, and is of any great size, the internal ring is more or less completely dragged down to the external, and the inguinal canal so entirely destroyed, that the finger is readily passes the external ring into the belly, as it does in a direct rupture. But in the early part of their existence, they may be distinguished

In the early period of oblique inguinal rupture the oblique course from above inwards and downwards, and the filled inguinal canal may be distinctly perceived, and the swelling is greater below in the scrotum, than it is at the external ring. On the contrary, in direct rupture, there is not any swelling in the direction of the inguinal canal, but the tumor proceeds straight through the external ring and passes into the scrotum. In one case which I saw six or eight hours after its occurrence, in a slight young man, produced by the slight exertion of sweeping a lawn, and which seemed to me a case of direct rupture, the swelling which had descended about three fingers breadth, directly from the ring, without any fulness of the inguinal canal, was really of the same thickness throughout, its diameter being about that of a couple of fingers. Whether such be the case always, at the first appearance of direct rupture, I do not know, as I have not seen another at so recent a period; but it was very remarkable in this instance, and if constant, would form another distinctive character of this form of oblique inguinal rupture.

C. OF ENCYSTED INGUINAL RUPTURE.

Sir Astley Cooper has described a form of congenital oblique inguinal rupture, which he called the encysted hernia of the tunica vaginalis, in which, on opening the tunica vaginalis, instead of the intestine being found lying in contact with the testicle, a second bag or sac is seen enclosed in the tunica vaginalis, and enveloping the intestine. This bag is attached to the orifice of the tunica vaginalis, and descends thence into its cavity; it generally contracts a few adhesions to the tunica vaginalis, which, in its interior bears the character of a common hernial sac. He considers in this case, that "the tunica vaginalis, after the descent of the testicle, becomes closed opposite the abdominal ring, but remains open above and below it. The intestine descends into the upper part, and elongates both the adhesion and tunica vaginalis, so as to form it into a bag, which descending into the tunica vaginalis below the adhesion and becoming narrow at its neck, though wide at its fundus, receives a portion of intestine." This is a form of rupture of very rare occurrence, and its formation may be either as Sir Astley Cooper states, or it may result after the obliteration of the neck of the sac, by wearing a truss in either kind of the inguinal rupture, provided the sac be not completely closed up to its mouth. In either case the bowel driving into the hollow, however small, above the adherent part, would thrust it down, bringing with it more peritoneum from the cavity of the belly, and thus a new and second rupture sac would be formed; which, as it descended, would pass lower and lower into the inguinal sac, and thus a double sac would be formed.

Precisely the same process takes place when a rupture and hydrocele exist together, whether a hydrocele first existing, a rupture forms afterwards, and descends as low as the distended vaginal tunic, as in prep. No. 1337, of the coll. mus.; or it may even drive down into it, so that the rupture sac is nearly surrounded by the vaginal tunic, as in prep. No. 1339; or whether the rupture be first formed, and the hydrocele occurring afterwards, as it increases, rises upwards with the bottom of the sac. In either case the remnant of the peritoneal covering of the spermatic vessels between the rupture sac, and the hydrocele is either absorbed or compressed into a smaller space proportioned to the distance between the hydrocele and the rupture sac.

The cases in which the rupture sac has been found behind a hydrocele, first noticed by Mr. Thomas Blizard, and subsequently by Sir Astley Cooper and Mr. Henry Cline, and which have since been found to be more frequent than supposed twenty-five years since, appear to me readily explicable in the same way. A hydrocele exists —a rupture descends till it reaches its upper part, and the disposition to protrusion still continuing, the sac begins to drive down behind the hydrocele, and probably as it lengthens, rolls down with it the back of the distended vaginal tunic, which thus [illegible] a second peritoneal covering in front of the rupture. Or a rupture may first exist, and a hydrocele subsequently forming, may, as it grows, ascend in front of the rupture sac, and thus the same condition of parts be produced, with the mere difference that the hydrocele ascends before the rupture, instead of the rupture descending behind the hydrocele. The fluid of the hydrocele does not necessarily remain; in Mr. Thomas Blizard's case it was absorbed, but in Mr. Henry Cline's, which I saw operated on, it poured forth when the vaginal tunic was opened.

These are the only kinds of rupture in which a double peritoneal sac can exist. When the adherent neck, in a congenital rupture descends vertically into the vaginal tunic, then the double peritoneal sac is complete all round; but when the rupture descends behind a hydrocele, then the peritoneal covering is double in front only, and not behind. In both cases, however, the testicle will be exposed in the course of the operation.

Many swellings of the scrotum, or rather of the parts which it contains, are liable to be confounded with ruptures, either just after their protrusion from the external ring, or when they have descended into the scrotum. The distinction, however, is generally not difficult; often, even with a slight examination, and when taken in connexion with the previous history of the case, and the constitutional symptoms. Hydrocele of the vaginal tunic of the testicle, although somewhat of the same form, especially if of large size, and as occasionally extending up the spermatic cord to the ring, and even into it, is distinguished by its transparency, by its first appearing at the bottom of the scrotum, and gradually ascending in proportion to its bulk; but I have never seen a single instance, however high a hydrocele might ascend, in which it was not possible to nip the cord between the top of the distended vaginal tunic and the external ring, and so ascertain that it has not any communication with the belly. Of course it undergoes no alteration in size, whether the patient be standing or lying down, neither does it dilate or increase on coughing, or any other effort by which the bowels are acted on by the abdominal muscles. One kind of hydrocele, which is, however, far from frequent, is liable to mistake; it is the congenital hydrocele, in which the vaginal tunic, not being closed at the internal ring, the fluid contained in it will swell out the hydrocele sac in the erect posture; but flowing back into the belly when the person lies down, the swelling disappears. But this may be, without difficulty, distinguished; because if it were a reducible rupture, which returned into the belly on lying down, the fingers placed against the ring would, in most cases, prevent the protrusion of the bowel, when the patient stands erect, and consequently, there would not be any enlargement of the scrotum. But in congenital hydrocele, though pressure be made on the ring, the fluid will ooze through the mouth of the sac into the hydrocele sac; and though not so quickly, yet as certainly at last distend it to its former size.

The more rare form of hydrocele, that of the spermatic cord, is more liable to be mistaken for a bubonocele, or inguinal rupture, which has just passed through the external ring. I have seen two or three instances in which this mistake has been made, and an operation thought requisite. A curious circumstance with respect to the hydrocele of the cord is, that the person sometimes says, it has appeared suddenly, and after additional exertion. Such was the statement in reference to the last two cases I saw—one of which was under my own care very recently. It would hardly seem possible that it should have been produced at once, or even in the course of a few hours; but the patients were positive about it. The appearance of such cases very closely resembles a bubonocele; but as in common hydrocele, the spermatic cord may always, with a little management, be grasped above it, and its complete independence of the cavity of the belly ascertained.

Varicocele may be mistaken for rupture, especially if the veins be very much enlarged. Like rupture, it increases in the upright posture, and mostly disappears in lying down. But if the fingers be placed on the ring, and the patient directed to stand up, the swelling not only re-appears, but is of larger size than before, because the pressure, though insufficient to prevent the blood passing through the spermatic artery, is sufficient to prevent its return by the veins, which consequently, become largely distended. This quick and increased bulk readily distinguishes varicocele from hydrocele, from which it is still further discerned by the knotty, rope-like, and general thickness of the whole cord, from the testicle upwards, and by its want of transparency.

Thickening of the cord from chronic inflammation and suppuration in the cord, which last is extremely rare, are said to be capable of mistake for inguinal rupture; and enlargements of the testicle of any kind are said to be so too; but mistake of either of these conditions can only arise out of great carelessness.

An arrest of the descent of the testicle at the abdominal ring, may be mistaken for rupture, but may be distinguished with a little management and tenderness, by keeping the finger and thumb on the cord between the testicle and the ring.

Rupture may be complicated with hydrocele, as I have already mentioned; and the rupture sac may either descend only to the top of the hydrocele, as in prep. 1338, of the college collection, or even not so low, or it may pass down behind it, as I have shewn. I may, however, observe that in a person of lax habits, a heavy hydrocele constantly dragging by its weight upon the cord, would certainly predispose to an oblique rupture, as it would be constantly pulling that part of the cord fascia arising from the inner ring, and thus produce a little hollow, into which, by the ordinary pressure of the abdominal muscles upon the bowels, the peritoneum would be forced, and thus the beginning of a rupture sac be formed.

The absence of all symptoms of strangulation, or those accompanying peritonitis would prevent in the first instance, any mistake as to the swellings of the scrotum from ruptures or other causes. But when such symptoms occur, and such swelling of the scrotum also exists, then the attention must be directed to ascertain the true character of the tumor.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XIX.

RUPIA AND ECTHYMA.

According to Willan and others.

GENERA	SPECIES.
Rupia	R. Simplex R. Prominens R. Escharotica
Ecthyma	E. Vulgare E. Infantile E. Luridum E. Cachecticum

As proposed by Startin.

GENUS.	DIVISIONS.	FORMS.
RUPIA R. Simplex vel Sero-sanguinosa R. Ecthymata vel Pustulo-sanguinosa Escharotica vel Gangrenosa	Localis Generalis	Acuta Chronica Insulata Sparsa Conferta

GENTLEMEN,—The cutaneous diseases on our chart which present themselves next in succession to sycosis, and somewhat resemble this malady when in an insulated form (both as regards the place they occupy when situated on the face, and also in their external manifestations after their earliest stages have passed), are those designated rupia and ecthyma. I purpose considering these as one disease, having a sero-sanguineous and a pustulo-sanguineous variety. Most authors on skin complaints, since the time of Bateman, have allowed that, as regards all practical purposes,

this arrangement would have been sufficient, as both maladies occur under precisely the same states or conditions of the constitution. But the orders into which cutaneous diseases have been arbitrarily and somewhat incongruously divided by authors, would then be inapplicable to the two affections, as pustules and vesicles must have been united, instead of constituting a distinct class of complaints, as they are now made to do. This is done at the expense of simplicity and natural arrangement; both appearances being constantly found co-existing in the same patient—a remark I have before had occasion to make when speaking of another pustular and vesicular disease—impetigo and eczema. The reductio ad absurdum of such a system is, however, in my opinion, accomplished by its originator and advocates placing the small-pox, and common itch, under the same order; because pustules may, at some precise moment of the existence of these diseases, be their common characteristics.

The term rupia, which has hitherto been applied to a vesicular disease, only occurring in a vitiated state of the general health, is derived from a Greek word signifying sordes, as indicative of the diseased and sordid condition of the parts affected; it is, therefore, equally applicable to the complaint known as ecthyma, when this state of the body obtains, only that pus may be more commonly formed in its earlier manifestations, often intermixed, however, with vesicles. The definition I would, therefore, propose for rupia is, that it consists of a non-contagious eruption on the skin of flattened vesicles or pustules resting on a more or less inflamed base, their size varying from that of a small-sized button to that of a halfpenny. The fluid contained in these eruptions may be of a sanious or puriform nature, but they speedily break in their centres, and concrete into an adherent, hard laminated scab of a dark reddish brown colour and considerable thickness or prominence, which covers ulcerations of greater or less depth and extent.

When a sanious fluid is secreted in the diseased parts, these encrustations are commonly superficial, on the other hand, when their contents are purulent or sero-purulent, the crusts are seldom so prominent, and they are found embedded in the inflamed portions of the skin on which they are situated—a fact rendered evident by an inspection of the models of this curious disease which are arranged for your observation; but also conspicuously seen in the individual attending, whose case I shall presently allude to.

Rupia is so rarely witnessed, unless as a symptom of some constitutional disorder, or cachexy of the system, that its appearance may constantly be regarded as a pathognomonic sign of the existence of one or the other state in the individual attacked with the complaint. Thus it is most frequently seen amongst the poor and squalid, residing in ill-ventilated, unhealthy localities, or those persons who have suffered from lingering illnesses or undergone long courses of medicine, particularly in cases were iodine has been taken. This was the case in the patient I have had the pleasure of showing you, as this poor man had been afflicted with inveterate lepra vulgaris *for fifty years*, for which he had been under treatment here for a month or two, and had been subjected to the influence of iodine in combination with other remedies, principally chalybeates. He had not taken arsenical, or mercurial medicines whilst under my care, but had used the iodide of sulphur as an ointment, and bathed twice or thrice a-week in an alkaline bath, which occasionally was suspended for the vapour bath. By these means his skin had become quite clear, and the leprosy, in most situations, had disappeared, indeed, as the patient told you, "he had not been so well for fifty years;" nor is his general health disturbed. Within the last week or ten days, I perceived an eruption on the legs of this patient, which answers to the malady Willan has called ecthyma cachecticum, and which I attribute to the effects of the iodine, as I have many times witnessed a similar occurrence; perhaps, also, the bathing has had a share in its production, for what the hydropathists call *their crisis* is no more nor less than a similar eruption to that you have witnessed.

No part of the body is exempt from rupia, and every age and sex is subject to its attacks; yet it seldom, if ever, appears in the healthy and well fed, unless as the sequel of some debilitating bodily or mental cause.

I feel inclined to agree with the view taken by Plumbe of this disease, "that it is clearly dependent on a similar state of the vessels of the skin to that giving rise to the formation of petechiæ;" and that lesion of some capillary vessel takes place in every spot on which a vesicle or pustule of rupia is discovered. Thus the inflammatory action accompanying the disease, the ulceration and encrustation, are the there natural processes first to remove, and afterwards to repair the mischief; the precise manifestations of the eruption being always regulated by the constitution of the patient, and other circumstances as readily appreciated.

Willan divided ecthyma into four varieties, resting entirely upon these modifications, which he called E. vulgare, E. infantile, E. lividum, and E. Cachecticum, a very needless complication, and one leading to no practical result. Rupia he also considered under three species, R. simplex, R. prominens, R. escharotica. With your permission I propose to simplify this subject by comprehending both diseases under the term rupia, which, as I have written on the chart, I shall divide into three species, designated from their most prominent marks, rupia simplex, vel sero-sanguinosa, R. ecthymata, vel pustulo-sanguinosa, and R. escharotica, vel gangrenosa. These three species may be local or general, and they may appear in a chronic or acute form, and insulated scattered, or grouped together on the part of the body they infest; it is not uncommon, in severe cases, to witness two or more of the species existing on the same patient. In addition to the constitutional causes of rupia, as above divided, it may be produced by any long-continued inveterate irritation of the skin; for instance, it is a very usual sequel of scabies amongst the poor and destitute. I have also occasionally witnessed its production from the irritation of various mineral substances amongst colour-makers, drug grinders &c.

Tartar emetic, as is well known, occasions an eruption of rupia ecthymata, and arsenic and other caustic irritants have the same effect in those subjects who may be said to have a predisposing idiosyncracy.

Rupia simplex is a form of the disorder which consists mostly of a scattered, successive eruption occurring on the extremities, the buttocks, shoulders, and other parts of the body), of red, flattened tubercles, which, in a day or two, produce a vesicle, filled with a sanious lymphatic fluid, that rapidly enlarges whilst the base becomes inflamed and more or less indurated, each eruption pursuing a course somewhat independent of those around it. In four or five days, or a less period, from the commencement of this disease, the vesicles break, and discharge their contents, which shortly concrete into brownish-red scabs, whilst the surface below them consists of a smooth polished ulcer, that has little tendency to heal, but keeps enlarging by the circumference, and pouring forth its secretion, which concretes layer after layer until a thick, laminated, and sometimes conical scab, is produced (the rupia prominens of Willan). This eruption is attended with stinging and smarting pains rather than itching, which are augmented by handling the part, and the constitution is often so affected by them as to manifest more or less feverishness and irritation. When the healing process has been accomplished, either by nature or art, a cicatrix is rarely observable, but the part shows for a long time a dark red spot.

Rupia ecthymata occurs under precisely the same circumstances as those I have detailed as attendant on the preceding species, but pustules are formed instead of vesicles, or the tubercular eruptions which usher in the disease; the inflammation also is commonly more violent in these cases, and consequently there is greater pain and induration, whilst the ulceration beneath the crust is more profound. The circle of redness surrounding this disease in the worst cases is such as to have occasioned Willan to adopt the term ecthyma luridum. There is perhaps a greater degree of pain in R. ecthymata than in the first described species, and the scabs are neither so hard or so prominent as in that affection—the pain, indeed more resembling that which accompanies a boil; but there is no core, or slough in the disease I am describing, which at once distinguishes it from the painful affection alluded to.

I may refer you to several models on the table, which, better than language, will illustrate what I have advanced on this subject; and you will observe on how very slight a difference Willan founded a distinction between two diseases having very constantly a common origin, and requiring a similar treatment. As might be expected in protracted cases, when the ulceration has been deep, both these varieties of rupia occasionally leave small scars on the sites they have occupied, but in the next species this is most remarkable, from causes which will be obvious from the mere repetition of its name, *R. Escharotica vel Gangrenosa*—happily a very rare affection, and occurring only amongst the poorest and most diseased or asthenic subjects—at least, I have never seen it under other circumstances. It commences in a manner precisely similar to rupia simplex, on the thighs, buttocks, genitals, extremities, loins, and cheeks of its victims, which are mostly the young, particularly children, though I have occasionally seen it in adults; at this moment I have a private patient under my care, with a ruined constitution and asthenic, in whom it exists on both legs. It runs, for a variable period, the course of the other species of rupia, manifesting not unfrequently the ecthymatous form, when a black point commences generally on the edge of one or more of the ulcerations, and thence rapidly extends to the sound parts, producing a phagedenic or gangrenous eschar, that assumes a black colour, and when it slowly separates from the living parts, leaves a deep pit and indelible scar—in fact it is phagedenic mortification superadded to rupia, and is very constantly a fatal disease.

With regard to the treatment of rupia, and of the three species I have now described, I think it can scarcely be necessary to say much, as it is strictly constitutional, and therefore must be regarded entirely on the general principles which guide the practice of our profession; no two cases, unless arising from precisely the same cause, requiring similar remedies. I have found the black or yellow wash a better stimulating application to the eruption, in all its stages, than ointment of any kind, and the stronghold, as regards internal remedies, is to be found in the mineral acids, in preparations of Peruvian bark, in large doses of opium, and in diffusible stimuli, particularly ammonia, in full doses. Where a syphilitic taint, or scrophulous complication, may be distinguished, this treatment will of course require modification; and in the rare and dreadful disease called rupia escharotica, the free use of nitric acid or of a solution of mercury in nitric acid (the nitrate acide de mercure, of the French surgeons), is indispensable, and must be applied with no sparing hand.

With regard to the two former varieties of rupia, the practice of this institution furnishes numerous examples of this constitutional scab, and scarcely a day passes that opportunities for observing it do not present themselves, either on the persons of those unfortunate poor people who live in squalor and poverty, in the crowded courts which surround this locality, or in those who have suffered from the pain, torment, and irritation of the skin arising from other cutaneous diseases of protracted continuance. I shall, however, not detain you long in the recital of these cases, merely selecting one or two of the models, by way of example. The instance to which I now point is that of Amelia Shaw, aged 28, No. 5399 in the register, residing in Green-street, Stepney. This chlorotic young woman had suffered four years from her disease, which was a case of rupia ecthymata chronica, confined to one leg. Most of

M.

this time she had been under public medical treatment." The model was taken two months after her admission as a patient; consequently, much of the appearance of the disease first presented had vanished; yet sufficient remains to point it out as a case of what I have called Rupia Ecthymata. You will perceive few crusts remaining; but the pustules and ulcerations are evident enough. Unfortunately, the model cannot show the constitutional symptoms of this case, which were dependent on a scrophulous diathesis and uterine derangement, and probably organic disease — as leucorrhœa, containing shreds of adventitious membrane and curdy matter, in addition to most irregular menstruation, would seem to show more than the existence of mere functional disorder of the part. The treatment adopted has been very various, and it is only within the past month that the last sore has healed; she has thus been a patient of the Institution for six months. Chalybeates, the mineral acids, opium, the biniodide of mercury, in alterative doses, liquor potassæ, bark, and various forms of iodine, have been tried in succession; whilst aluminous and other astringent injections have been directed to moderate the leucorrhœa. Meanwhile the local disease on the cast has been treated with various stimulating applications in ointment and lotion. A wash, composed of calomel and bichloride of mercury, in lime-water, applied by means of a compress and bandage, has proved the most useful application to the ecthymatous ulcerations, and a decoction of bark, with liquor potassæ and laudanum, and biniodide of mercury, at bedtime, in grain doses combined with opium, have proved the most beneficial internal remedies. These united measures have succeeded in ridding this poor girl from the ulcerations which had so long tormented her; yet her constitution is far from re-established, for the leucorrhœa remains, though in a moderate degree, and the cause of the rupia can therefore be scarcely considered to be removed. A strict examination into the uterine disease is what is required, and must be instituted before we can proceed in the treatment of this case.

I have been much interested in this young woman's sufferings, from the fact of having attended a precisely similar case some years ago, which ended fatally; and I here show you the condition of the uterus and its appendages, not so much on their own account (though they afford a rare and beautiful example of tubercular deposition and disease in this part of the body), as to impress your memory with the fact that rupia, as I have endeavoured to describe it, is for the most part a symptomatic disease.

The next case meriting your notice is that of rupia simplex ulcerata, represented by the model marked 5431, appertaining to Thomas Spray, aged 20, a poor, deformed, asthenic individual, who came here on crutches, and in a wretched state of marasmus, from want and poverty. Both legs were affected in this case, though one only was taken by the modellers; and a very painful business it must have been, owing to the ulcerations present with the vesicular disease; yet I can assure you the poor fellow would gladly have had the operation repeated for the small sum I gave him to purchase a little nourishing food, which, more than medicine seemed to be required. On this model you will notice a verification of the remark I have already made, that both the forms—I might almost say the three forms of rupia are sometimes manifested in the same case. The vesicle filled with a sero-sanguineous fluid, in juxta-position with one containing purulent secretion, and ulcerations which have here and there a phagedenic aspect, as though gangrene was about to set in. What could I do with this unfortunate patient, in the way of treatment? I really felt at a loss, and regretted my poverty and that of the Institution which cannot afford a bed for such cases. I sent him, however, to King's College Hospital, with a supply of ammonia and laudanum, in the form of a mixture, that might revive and soothe his immediate symptoms. As I have not since heard of him, I should hope he has been received into that excellent charity, and that his very pressing wants are attended to.

I will relate one case more only of the variety of rupia termed escharotica. I have no model of this disease, but show you a very excellent plate of it in Dr. Willis's Atlas. The instance I am about to refer to is that of the little girl, Mary Simons, aged three, residing in Winchester-street. She was brought to the Institution about two months ago, by her mother, with excoriations in both groins, whilst on the left labium pudendi, a black-looking blister, somewhat resembling that which arises after a violent pinch, was observable. The child was languid, and had no appetite; yet there was no want of flesh; the aspect was pallid and cadaverous. I removed the blister with the scissors, and applied to the dark eschar beneath a little nitric acid, of the P. L. strength, by means of a piece of linen wound round a glass rod. The child did not suffer so much pain as might have been expected, and I directed the mother to take her home, and apply a large fermenting poultice. I also administered, every three hours, a mixture containing one grain of sesquicarbonate of ammonia and one drop of laudanum, and I promised to call the next morning. On my visit, I found the child looking better; it had slept soundly, and taken nourishing food and a little wine; yet two other patches of gangrene had appeared in the centre of the excoriations I have mentioned as existing in each groin. They were small and irregularly oval in shape, and not quite the size of the little finger nail: much dark, mahogany-coloured inflammation existed in both inguinal regions; the cauterised spot of yesterday seemed not to have extended. I applied the nitric acid rather more freely, and to all the gangrenous spots. Intense pain followed the application, but subsided in a few minutes. The medicines were directed to be continued in slightly augmented doses. On my visit next day, I found the little patient better in every respect. All the measures were continued, save that the acid was not re-applied. On the following day, no change in the treatment was advised; the bowels were regulated with castor oil, and in about ten days the sloughs separated, so that in a month the wounds were healed. Scarcely, however, was this accomplished, than the child became infected with measles, attended with so much bronchial inflammation and constitutional disturbance, that it died on the sixth day.

I had intended to have related one or two other cases of this fortunately rare disease (rupia gangrenosa), to show its dreadful nature and fatal tendency, but I think it will be needless. When the face is affected, a cure can only be accomplished with frightful disfigurement, than which death is almost to be preferred. With regard to the other models of R. Simplex and R. Ecthymata, it will suffice to say, that the recital of nearly every example would be but an account of some particular organic malady or constitutional derangement, I shall, therefore not enter upon them. Neither shall I more than make mention of the complications of rupia with syphilis and scrophula, which, as may be surmised, are of frequent and ordinary occurrence, as these diseases, it is well known, produce a cachexy in the habit exceedingly favourable to the production of rupia in all its forms, which I shall have occasion to demonstrate hereafter. I may mention, however, that I will gladly refer to any case connected with the models, on which any gentleman present may express curiosity.

The subject for our next lecture will be the comparatively rare disease known as pompholyx, or pemphigus.

ORIGINAL CONTRIBUTIONS.

NERVES OF THE UTERUS.—CONTROVERSY BETWEEN DR. LEE AND THE COUNCIL OF THE ROYAL SOCIETY.

[To the Editor of the Medical Times.]

SIR,—Though aware of your having positively declined taking any part in the controversy between Dr. R. Lee and the Physiological Committee of the Royal Society, as being a matter of no general interest, but simply a struggle between two cliques, equally base in their views—equally despicable in character—in which view I partly agree—you will, notwithstanding, excuse my requesting your insertion of the enclosed letter, addressed to a gentleman I greatly esteem, and who, though his name be involved in the "meshes of cliquerie," does yet abhor it as strongly as you or any other right-minded person. By doing so you thus enable me to fulfil my promise to Dr. Lee, and, as I trust, to satisfy Mr. Beck (another of the disputants), that I, in no shape, undervalue his labours, but, on the contrary, think very highly of them.

I have the honour to be,
Mr Editor,
Your much obliged and obedient servant,
R. KNOX.

MY DEAR MR. BOWMAN,

After my return to London my attention was first directed by yourself to a communication in the *Literary Gazette* bearing my signature; I applied at the office of the *Gazette* for a copy of the number containing the communication, and the *Gazette* for May 16 was put into my hands. On perusing what is there published with my signature, as reported by Dr. Lee, I cannot find any inaccuracy I should wish to amend; the report is no doubt imperfect, but quite correct so far as it goes. The reason for its publication, however, I did not rightly comprehend until some days afterwards, on meeting with Dr. Lee, who informed me that its hasty publication *had been caused* by a letter of Mr. Beck's, which I would find in a preceding number of the *Gazette*, namely, that for May the 9th. Mr. Beck's letter, it seems, called forth his reply, including my remarks on Mr. Beck's dissections of the nerves of the gravid uterus, made by me to Dr. Lee, on the morning following my examination of Mr. Beck's very valuable anatomical preparations. Of that letter I applied for a copy, and it is to certain parts of that letter that I mean to call your attention; your name and mine appear together; Mr Beck's is opposed to both. I would much rather that all this had been delayed or deferred until the opinions of the Physiological Committee of the Royal Society be submitted to a higher authority—their judgment examined by a body of men who are not known to form committees, nor clubs, nor coteries, nor cliques—and their unjust decision for such it is no doubt—reversed. But perhaps it is right that I should notice this letter now when all the circumstances are fresh in my memory, my remarks will, I feel confident, satisfy you, and even Mr Beck himself, that it is utterly impossible I should have any wish to undervalue his great labours, or detract from the merit justly due to him.

Permit me first to observe to you that Mr. Beck's letter strongly resembles his dissection of the nerves of the uterus; all which it contains may be true, and probably is quite true; but it does not contain the whole truth. This is precisely the state of his dissection, with this addition, that many parts have been dissected in an unusual, if not in an inadmissible manner: lastly, claims are made to discoveries, which, in no shape, belong either to him or to those to whom the reporter or reporters of the Physiological Committee have thought fit to ascribe them. That I may put this matter in as clear a point of view as I can, I have requested the Editor to reprint Mr. Beck's statement with mine; it would give me great pain if I found that I hurt Mr. Beck's feelings or yours by so doing, thus losing the good opinion of two gentlemen whom I highly esteem; but I cannot persuade myself that this will happen. To those on the other hand, who, to gratify the malignant feelings of one whose name does not appear *as yet* in this controversy, but who, notwithstanding, is the prime mover of all this vile display, have pledged the respectability which belongs to their status,—a responsibility attaches, which the profession may one day visit on their heads.

A considerable time (some years) ago, I examined the original dissections of the nerves of

the uterus by Dr. Lee, quite aware that the accuracy of these dissections had been disputed by many excellent anatomists; amongst others, by one whom I am proud to say I educated, and with whom I have been in constant friendly relation for at least twenty years—Mr. John Goodsir, of Edinburgh.* My report, printed in the *Medical Gazette*, on Dr. Lee's dissections, was very brief they appeared to me sufficiently accurate. The increase in the size of the ganglions and nerves in the impregnated uterus, was, I thought, to a certain extent, more apparent than real, still it existed. This was the substance of my original letter to Dr. Lee, written some years ago. Now when I had the pleasure of meeting you at the table of our mutual friend, Dr. Hodgkin, these things were talked freely of; you knew my former opinions and you very naturally said, "you had better see Mr. Beck's dissections." "Most assuredly" was my reply, provided there be no objection on the part of Mr. Beck himself." After hearing from you that Mr Beck would, you were sure show me his dissections with very great pleasure; that he courted, rather than shunned, a full inspection of them by anatomists, I accepted this shall I call it friendly, challenge, to correct my former opinions.

Now my dear Mr. Bowman, this was not all our conversation at the hospitable and kind table of our much esteemed friend, we discussed other "nervous dissections," if I mistake not, at the same time, and it was here that you mentioned to me "*a peculiarity* in Mr. Beck's dissections, which rendered more than doubtful the existence of the greater part of Dr. Lee's preparations of the nerves of the uterus."

I have now, I think, disposed of Mr. Beck's objections to the word "challenge," let us by all means say, invited me to correct my former opinions; this, no doubt, is the proper word, and the one which Dr. Lee would use were he rewriting his correspondence; a challenge is "a defiance" in one sense; now, you could not give this for more reasons than one, but especially *for this one*, that you yourself entertain great doubts of the *absolute correctness*, of either dissection. my own feeling is, that were we to go over these preparations again we should *easily agree*; but to return.

We proceeded to Mr. Beck's house on the day appointed, Mr. Fergusson accompanying you; what that gentleman's opinions are will appear in due time; he made a shrewd remark to me, worthy of his reputation as a most acute and practical observer, and minute anatomist; all this may appear in due time, but it is clear that in a controversy of this kind it is not warrantable to draw into it the names of gentlemen to whom ultimately the whole matter of dispute may be referred—yes, referred - for it cannot rest here. Allow me to examine these dissections in presence of Messrs Fergusson, Stanley, Granger, Lane, Lawrence, Willis, and Liston—any one of whom, by the extent of his practical anatomical researches is perfectly competent to decide on this matter without the aid of another—and I will undertake speedily to put an end to this controversy; but I will have nothing to do with persons who owe their reputation, such as it is, to position, to management, to political influence, who, when a new idea is started by a continental writer throw themselves, *con furore*, as an Italian would say, into it—appropriate it to themselves -place the names of the original discoverer either in an obscure foot-note, or speak of him merely in connexion with some trifling error of detail, which they claim the merit of correcting; neither do I choose to refer any such matters to men who write of anatomical discoveries, and yet cannot recognise the great hypogastric nerve when shown them. During the course of my examination of Mr. Beck's very beautiful preparations, every assistance was offered me by that gentleman; I feel greatly obliged to him for his courtesy and kindness. The conversation was, of course, an interrupted one; it amounted nearly to this:—

I. The tissues of the uterus had been but little opened into by Mr. Beck; when separated somewhat by myself numerous filaments might be seen which much experience convinced me were nerves Mr. Beck's offer to submit any portion of these filaments to high microscopes I declined. For this there could be no occasion with structures which I could make out, either with the unaided sight or with the very feeble hand-glass you saw me use.

II. I remarked to Mr. Beck that the *scarcity of nerves* in his dissection following the course of the arteries or vessels *surprised me*. I told him I was not altogether prepared for this, admitting, however, that many years ago I had myself made out on the heart of the seal the fact, that many nerves proceeded to the fibres of the organ in that animal which did not in any way follow the course of the vessels. Still the comparative scarcity of such nerves in his dissections surprised me.

III. By opening the sheaths of the nerves to such an extent as Mr. Beck has done, the nervous character is apt to disappear and to be confounded with the cellular tissue; under this mode of disection ganglions assume a new form · the grey matter is scraped away, and what appeared a single ganglion becomes a group of ganglions marked by plexuses of a peculiar character, and such as I had not seen before; these remarks were certainly made in Mr. Beck's presence, for he observed to me that these were very peculiar and "unlike what occurred in other parts of the "body," perhaps I ought to have said that to me they did not seem to be plexuses at all; but I should have been acting contrary to my nature to have entered on a controversy in the house of a gentleman, who had behaved in so liberal and straight forward a manner to all Besides you must know well, although the Physiological Committee does not seem to know it, that by a similar manipulation some years ago attempts were made to shew that many of the large ganglionic structures of the uterus were *illusory ganglions*, that is, were composed of several smaller ones, united, not by plexuses, but by numerous communicating filaments. Surely this fact cannot be new to all the members of the Royal Society.

IV. You called my attention especially *to a remarkably long nerve* running down the front of the uterus, the course and presence of which rendered, in your opinion, the great portion of Dr. Lee's dissection doubtful. It sent off you thought, no branches; it received, in your opinion, no communicating filaments throughout its length and course; to *this nerve* you especially called my attention. Mr Beck was present during the whole discussion regarding this nerve.

1 I remarked to you that this nerve was not of uniform strength, *but tapered*, now you admitted immediately that *it tapered*. But nerves which *taper* give off branches, *ergo*, this nerve must have given off branches originally, but no such are now to be seen, *ergo* they must have been cut away.

2. I next remarked to you that it *tapered* unequally; that is, that it must have given off nervous filaments and received others. I showed you *two branches* which must have been *cut across* during the dissection; the portions were still left attached to the pretended *long nerve*, or rather, as I would call it, *superficial plexus* and the other ends of the divided branches were lying close by in the tissue of the uterus. You immediately examined those two divided branches, and told Mr. Beck that he must admit them to be so; Mr. Beck's answer was, that if I would raise up the portion in the uterus he would immediately test it with the microscope. The agreeing to such a proposition would precisely have been a [illegible] to the examining of one of the ends of [illegible] which had been cut with the scissors in my presence in order to ascertain whether it was the same string or not; I know not what you thought of Mr. Beck's proposal. I of course took no notice of it.

IV. I soon after shewed you two other branches which had been cut during the dissection: fancying that you were not so fully satisfied with them I took the liberty of shewing you that the nerve varied in thickness at these *additional points*, and that filaments lay beneath corresponding to the divided branches. I think it was soon after this that Mr Beck left the room for some time; I think he felt that he had lost your support on a most important point; with respect to our further conversation the public has nothing to do; you being associated with those of whom St. Paul says, "there be some who gaze dimly through darkened glasses," in no shape detracts from your high merit as an observer. It has always afforded me the highest pleasure to converse on scientific matters with persons like yourself and Mr. Beck; the few who desire "to know the unknown" are persons with whom I particularly dislike to have any controversy; literary and scientific pirates I abhor and detest; I believe they know it to be so, and thus no love is lost between us. Mr. Beck and his friends attach much importance to the opening up the sheaths of the nerves, separating their component fibrils, dissecting the ganglions so deeply as to remove in as far as possible all that is not nervous matter, now, there can be no objection to this, as an object of closet inquiry; but in the first place, the method is *far from novel*; and in the second place, it is difficult to see where it is to end. In many parts of the body ganglions considered as single, are readily resolvable into two or more, by dint of scraping. The superior cervical ganglion itself, on being treated after this fashion, occasionally assumes the form of three or four distinct ganglions, perhaps it really is an aggregate of so many ganglions, representing the number we ought to find in correspondence with the uppermost cervical vertebræ; philosophic anatomy warrants a view of this kind, but still, for all practical purposes, the superior cervical ganglion had better be described as one. Microscopic anatomy is unquestionably, like transcendental anatomy, a valuable instrument of research; in the meantime, their misapplication has done much mischief in the medical educational institutions of the metropolis I have seen numbers of medical men and students "peering dimly through glasses," whom I could not persuade to learn correctly the exact descriptive anatomy of any organ of our frame.

In conclusion, I am free to admit that I have with the greatest reluctance engaged in a controversary, in the conducting of which by one party at least, it is evident that the scalpel and common sense have been abandoned for the pen and the microscope. In a struggle like this, the practised -I might almost say the thorough hack—is sure to have the best of it. Compilers, par excellence, who so dexterously interpolate the deep researches of continental writers and discoverers, with their own crude, closet conjectures and comparisons, as to render it difficult to discern the source whence such labours have come; who shift the pen for the scissors, and vice versa, with such consummate skill, that the result is a highly finished and glazed mosaic carpenter work, calculated to deceive any one but those who know them well from their earliest flights; with such persons, I repeat, I much hesitated to enter into any controversy. What I have stated is so simple in itself, so plain a matter of fact, that I trust I may avoid all pen and ink conflicts. [illegible] appeal to the inspection of the structures, where I trust to be as much [illegible] as any of the disputants. Of the insinuations thrown on against some members of the physi[illegible]rical [illegible] mittee, of their having engaged Mr. B[illegible] secute this enquiry, for the purpose of in[illegible] Lee's reputation I [illegible] remark, that supposing [illegible] correct, I cannot [illegible] how they in any way [illegible] the merit due to Mr. Beck, for his untiring [illegible], for [illegible] dexterity, for his love of science, [illegible] time, believe these insinuations to be well-founded.

* [illegible] a singular circumstance, a knowle[illegible] of which I owe to Dr. Lee, that my esteemed friend Mr. Goodsir pronounced against the accuracy of Dr. Lee's dissections without having seen his preparations

HOSPITAL REPORTS.

GLASGOW ROYAL INFIRMARY.

Reported by WALTER BAIN, Esq

DIABETES MELLITUS, PHTHISIS. RELIEF.

James Cowper, aged twenty-four, a Scotch sailor, unmarried, was admitted into the Glasgow Royal Infirmary, March 14th, 1845, under the care of Dr. Watson.

The patient complains of great thirst, copious discharge of urine, cough, and expectoration.

His urine resembles water in appearance, is of a sweet taste, its specific gravity 1044. Appetite moderate; tongue white; gums red, soft, and bleeding readily on pressure. Bowels regular; skin soft but dry. Nails convex. Pulse 104. He is much annoyed with flatulence after taking food, and his cough is worst in the morning. Breathing easy. The percussion sound under the right clavicle is duller than that under the left, over rest of chest it is natural.

Under right clavicle respiration is rough, and vocal resonance is increased. Over the left side of the chest there is much soft crepitation, and in the axilla some gurgling. Respiration over the left scapula harsh, and vocal resonance more intense than natural.

The patient is of tall stature, thin, but muscular; his cheeks are sunken, but he looks well

He has been much abroad, and in all climates, and he attributes his illness to variations of temperature. He has been ill for eleven months, great thirst being his first symptom. He first observed his urine to be sweet ten weeks ago, and about the same time the cough began to annoy him much. He is not aware of the nature of the diseases of which his relatives have died.

5th. Sumat stat. ol. ricini, ℥ss.; H. S. hab. pulv. Doveri, gr. xv. Sumat in dies intus. gentian. co. ℥viij.

6th. Urine ℔ix. Craves more food.

Hab. pro cib. Carn. ℥xvi.; Lactis ℥x.; Panis, ℥xij.

Rep. pulv. Doveri et infus. gent.

10th. Urine ℔xiij.

Sumat pro cib. Carnis, ℥xxiv.; Panis, ℥vj.; Lactis, ℥x.

Sumat in dies, aq. calcis, ℔ij., et bis in dies opii, gr. j. Omittr. pulv. Doveri. Secunda. q. q. nocte hab. bals. tepid.

12th. Urine ℔x., still sweet.

Contr.

14. Urine ℔x. The patient is somewhat feverish, and his cough more troublesome. Physical signs as at first report.

Minuat. carn. ad ℥x.

℞. Tart. antimon. gr. iv.; acetat. potass. ʒij; Aq. puræ, ℥vj.; Sacchari flavi, ℥ss. In die sumend.

Fiat V. S. ad ℥x.

15th. Blood not cupped; serum milky, sp. gr. 1044. Urine ℔ix. Feels better than yesterday.

Contr. medic. et cib. ut heri.

16. Less fever.

Contr. medic. Add. cibo. ova gallinæ duo.

18. Fever gone.

Augeat. caro ad ℥xvj.

Contr. alia.

19th. Much as formerly. Craving for food.

Contr. mistur. c. tart. antimon., gr. v. H. S. hab. opii, gr. ij

Contr. cib.

21st. Augeat. panis, ad ℥ix. Adhib. vesic. pectori superior.

Contr. alia.

24th. Rept. vesic. pectori.

25th. Much the same. Still craving.

Augeat. caro ad ℥xx.; panis ad ℥ix.

Contr. alia.

27th. Cough hard and troublesome.

℞. Mistur. mucilag. ℥vj.; Tr. opii, ʒj. pro tussi Sumend.

April 7th. General health and pectoral symptoms improved, but his urine still continues copious and sweet, and sp. gr. 1044.

Contr. cibum et opium. Omittr. mistur.

℞. Sulph. quinæ, gr. ij. Sumat in die c. acid sulphur.

12th. Loathes fresh meat.

Omittr. quina.

Sumat ter in die. Tr. mur. ferri, ♏. viij.

19. Appetite still deficient. Urine as formerly. Cough increased. Getting thin. Hectic.

Omittr. medic.

Hab. in die Cerevis. fort. ℔j. Sumat opii, gr. ij. Mane et vesp.

℞. Creosoti, gr. j; Mic. panis. Q. S. ut ft. pil Sumat iv. h. in in die.

20th. Refuses animal food. Pectoral symptoms much as formerly. Cough easier. Urine smaller in quantity, but still sweet.

To have milk diet, ad libit, with four eggs four times a-day.

21st. He wishes to go home.

Dismissed.

DESTRUCTION OF FOREARM, COMPOUND FRACTURE OF LEG, PRIMARY AMPUTATION OF ARM, PNEUMONIA—CURE.

Alexander Thomson, aged twenty-nine, Scotch engineer, unmarried, was admitted into the infirmary, May 27, 1845, at half-past five, p.m., under the care of Dr Laurie.

Two hours previously, while at work near the fly-wheel of a steam engine his right fore-arm was caught between two toothed wheels, and he was carried several times round with them.

On admission, the right fore-arm from the fingers to the elbow was found to be reduced to a jelly.

Both bones are fractured, comminuted and deprived of periosteum to a great extent, the integument and muscles are completely destroyed, and no arterial pulsation can be detected below the elbow.

The left tibia is fractured obliquely about two inches from the ankle-joint, and there are two small wounds in the integument about three-fourths of an inch above, and communicating with, the fracture. Fibula uninjured. The limb is swollen and tense as far as the knee. The patient has lost much blood from the injured extremities, but all hemorrhage has now ceased. His face and lips are pale; and his extremities cold. Heart's action feeble. Pulse 70, weak. He has has had some retching and vomiting.

Adhib. sinapism epigastr. Warmth to extremities.

8, p m. The patient has rallied considerably. On consultation, amputation of the right arm at its lower third was unanimously recommended. Leg to be dressed with a wet Scultetus' bandage, and lateral splints.

The operation was performed at half-past eight as recommended; the patient bore it well.

Hab. in dies Vin rubri., ℥iv,; omni nocte Pulv. opii, gr ij.

29th. The patient has rallied completely; pulse 100, of good strength. Stump and leg perfectly easy. Ordinary Diet.

Contr. omnia.

31st. The patient is much the same as at last report. Stump to-day partially dressed, looking well; leg easy, also doing well

Contr.

June 2nd Augeat. vin rubr. ad ℥vi., in die.

Contr. opium.

5th. Stump repeatedly partially dressed. Portions of sloughy cellular membrane removed; going on well. Leg still continues easy.

Contr.

9th. The stump was fully dressed to-day; part of the flap was sloughed, otherwise looks well. The leg was also examined to-day, and a large slough was found on its inner side over the fracture. Has never complained of uneasiness in seat of slough, and has none now. Pulse 90, of good strength.

Contr.

22. Stump nearly healed; sore on leg pretty large, but granulating well. Union of bone commencing. Limb put up with a dry, many-tailed bandage, pillows, and lateral splints.

Contr.

July 3rd. The patient went on favourably till two nights ago, when he had slight feeling of cold, followed by heat and feverishness. At present his face is flushed and countenance somewhat anxious. Pulse 110.

On dressing the stump, a small abscess was detected in the axilla, which was opened; the bandages were removed from the leg, which is looking well, and healing rapidly. Bone pretty firm.

Contr.

4th. The patient has this morning severe pain, preventing deep inspiration, along lower part of both sides of chest. In both situations but especially in left, fine crepitant râle is heard at the termination of inspiration. Some cough, with rusty expectoration. Pulse 120, sharp.

Pectori adhib. sinapism. amplum et postea cataplasm. emollient. Milk diet. Omittr. omnia.

℞ Calomel., gr. ij.; Opii pulv., gr. ss. M.

Fiant pulv. tal. xij., quorum sumat, j., quarta q. q. hora. Hab. vin. rubri, ℥iv

5th. Pain in the chest relieved; lungs more completely filled during inspiration. Crepitation less extensive. Pulse 114. Tongue clean. Bowels confined.

Contr.

6th. Pains still easier. Pulse 108. Tongue cleaner. Bowels opened.

Contr.

7th. Pulse nearly the same. Pain easier. Crepitation still heard on left side. Mouth a little sore.

Sumat pulv. sexta, q. q. hor. tantum.

8th. Still pain in side.

Lateri impon. vesic. modic.; post. cataplasm.

Contr. pulv.

9th. Pain rather relieved. Bowels loose.

Pulv. singulis add. tinct. opii, ♏. x.

10th. The patient had a slight chill last night. Pain the same. He perspires about head. Pulse 120, feeble.

Hab. vin. rubri, ℥vi. in die.

11th. he has had no return of rigor. Pulse 115, more firm. Mouth decidedly sore.

Sumat pulv., j., vesp. tant.

15. He feels pretty comfortable from the time he awakes in the morning till half-past one, p.m., when he becomes feverish. Pain of side less. Percussion dull still. Respiratory murmur deficient, and crepitant râle still audible.

Rept. vesic. lateri dextr., sumat pulv. mane et vesp; Minuat vinum ad ℥iv.

17th. Chest and respiration little changed. Yesterday pain and swelling of wrist and fingers came on. Granulations of leg have sloughed and separated. Sore now looks clean.

℞. Sp. æth. nitros., ℥iss.; vin. colchic., ℥ss. M. Sumat, ʒj bis in dies ex aq.

Foveat carp. et man. Contr. vin. et pulv.

21st. The pain and swelling of the fore-arm are better. Pulse 108, intermitting every ninth beat. Percussion and respiratory murmur improved on both sides anteriorly; behind not examined. Tongue white. Sensations less comfortable. More feeling of debility. Bowels loose.

Pulverib. sing. add. opii pulv., gr. j.

Contr. alia.

29th. He was to-day turned on his left side in consequence of threatened bed sores. Right side of chest now clear anteriorly; dull posteriorly. Crepitation and bronchial respiration in latter situation. Pulse 108, of good strength, now regular. Tongue pretty clean. Cough increased. Bowels loose. Pain and swelling of fore-arm gone.

Omittr. pulv

℞. Hydriod. potass., ʒj.; Aq. distill., ℥xiv.; Tr. opii, ʒij. Solve. Sumat ʒj. ter in dies.

Contr. vinum et hab. in dies. Cerevis fort. ℔j.

August 9th. He continues to improve. The sore on his leg is healing. He got up to-day for the first time.

Omittr sol. hydriod. potass.

September 8. In every respect well.

Dismissed.—Cured

The patient showed himself at the Infirmary in the beginning of October, at which time he had quite recovered from the effects of his serious accident.

URINARY INFILTRATION, PERINEAL ABSCESS FROM RUPTURE OF STRICTURED URETHRA —RECOVERY.

Wm Morrison, aged forty years, Scotch weaver, married, was admitted into the Glasgow Royal Infirmary, July 28th, 1845, under the care of Dr Hannay.

The patient has been of very intemperate habits for many years, and fifteen years ago he contracted venereal disease since which he has always had difficulty in voiding urine, and occasionally after exposure to cold or intemperance, he has suffered from complete retention

He has never had any treatment, and he says, when retention has come on, he always succeeded in relieving himself by the application of hot fomentations to the hypogastrium and perinœum

Three weeks ago he had an attack of retention to overcome which his usual remedy failed, and after suffering great pain a swelling formed in the posterior part of the scrotum and gave him relief He was pretty well for a few hours after this, but soon felt a tingling heat and pain about the perinæum The swelling afterwards burst and gave exit to a considerable quantity of matter and afterwards to urine

On admission, a large sloughing cavity was found to exist in the back part of the scrotum which was swollen œdematous red and painful Walls of cavity were of an ash gray colour, extremely irregular, and discharged a fœtid pus with a highly urinous odour The hypogastric region was swollen, red, tense and painful from the pubes to the umbilicus, and from the crest of the ilium on one side to the corresponding point on the other The swelling felt hard and boggy, and at one or two points decided fluctuation could be felt

Catheterism with instruments of all sizes, metallic and gum elastic, has been attempted in vain A large instrument detects a long stricture about three inches from urethral orifice The smaller instruments pass down to the triangular ligament but no farther The catheter when in the urethra, can be touched by a probe introduced into the cavity in the scrotum, but neither can be passed thence into the bladder The middle lobe of prostate gland is much enlarged

The patient is very feeble Pulse eighty-eight weak Countenance sharp and expressive of irritation

Sounds of chest are normal, abdomen natural Tongue clean Bowels open

Incisions were made into the swollen parts of the abdomen, and afterwards fomentations were applied

30th Several incisions made through the swollen, red, and tender skin in the left iliac region, giving vent to a small quantity of buff coloured curdy like pus and much blood The hemorrhage was immediately stopped by plugging with lint

The urine flows freely by the perineal fistula, some also escapes by the natural passage Catheterism was again tried in vain Constitutional symptoms moderate Bowels not opened since admission

Hab stat ol. ricini ℥ss et injiciat vesp enema domestic Hor Somni hab haust, c tr opii m xx Ordin ry diet

August 1st Erysipelatous redness and swelling at the lower part of the abdomen is considerably diminished Another incision made to day, gave exit to the same kind of matter as before, the patient has passed a good night Constitutional symptoms moderate

Hab tr in die camphoræ gr v, pulv opii gr. ii

2nd The discharge from the incisions is more healthy. The skin over the hypogastrium is stil red and swollen, but less painful The urine is freely discharged by the aperture in the scrotum which also looks more healthy Pulse 96 small Contr Pulv.

Hab in dies vini rubri ℥vj, Admov cataplasm emoll hypogastr

5th. The skin over the lower part of the abdomen is less swollen, there is a considerable discharge of healthy pus The scrotum is stil swollen and painful General health improves.

Hab suspensor Contr omnia

The suspensory bandage, has given much relief The cavity in the back of the scrotum is granulating well, and has contracted, much urine still flows by the fistula The lower part of the abdomen is now nearly well, and the patient feels much stronger, and takes his food well Contin vinum rubrum pulv. vesp tant.

12th He is improved in all respects and to day a No 3 catheter was passed into bladder, and allowed to remain for a short time Contr. omnia

21th The swelling, redness, and pain in the hypogastric region are nearly gone, no sloughs have come out of the incisions The cavity in the scrotum is healing rapidly Catheters have been regularly passed since last report and now the patient voids nearly the whole of his urine by the urethra Contr omnia

28th A full sized instrument can now be passed into the bladder. The lower part of the abdomen is now well, save a small ulcer over one of the incisions The cavity in the scrotum is nearly well but there is still a fistulous opening into the urethra The patient wishes to go home Dismissed

TO CORRESPONDENTS

The article on "Dr F's cement paint" can only be inserted as an advertisement

R R R —*We do not know the address of* Gower *the Truss Maker*

X *An advertisement on Vapour Baths will be found in our advertising pages*

A Druggist *We learn from "the Patent Journal" a very cleverly conducted journal that none of the "Patent Medicines" are protected by patent Everything may be imitated but the name of the Proprietor*

We have received several letters on the Hounslow case their contents in general will be found elsewhere anticipated The interest the judicial mismanagement of the case has produced and the feeling of the Profession that they have been ill-used in it, and an execrable example shown to other coroners, is universal

Leith —*The quarantine report has been received Several records of cases from correspondents in our next*

Mr Morris *is informed that the liberty is always taken by us and is grounded on general considerations of our space and the paper's merits The other article referred to, is an advertisement*

A Subscriber in Need *should consult any medical practitioners*

U S Club —*The rumour of the Coroner drawing up his own verdict, should have been authenticated*

Mr Fothergill's *letter has been received*

THE MEDICAL TIMES.

SATURDAY, AUGUST 15, 1846

Perhaps after all there is no better friend to Conservatism than your ultra con Radical Snob When a man preaches to you that all noblemen are tyrants, that all clergymen are hypocrites and liars that all capitalists are scoundrels banded together in a conspiracy to deprive the people of their rights he does less wholesome revulsion of feeling in favour of the abused parties the reverence of fair play leads the generous heart to take a side with the object of unjust oppression

For instance although I hate military flogging the most brutal and odious relic we have left of the wicked torturing old times and have a private opinion that soldiers of crack dragoon regiments are not of necessity the very wisest of human creatures yet when I see QUACKLEY the Coroner giving himself heroics of patriotism and attacking the men for the crime of the system (of which you and I are as much guilty as COLONEL WHYTE unless we do our utmost to get it repealed) I feel myself led over to the brow beaten side and inclined to take arms against QUACKLEY Yesterday, a fellow was bawling by my windows an account of the trial at Hounslow, [illegible] [illegible] brutal and savage Kurnal [illegible] for the small charge of Wun Apny" *Was that fellow a ... patriot think you or a Radical Snob, and ... the wanted to put down flogging or to get ... ?* Punch, (*article Snobs of England*) Aug 8

WHEN we branded the judicial actings at Hounslow as a disgraceful abuse of an important magistracy, we promised early to resume the evidence in support of our opinion We meet however, some peril in performing the duty "Coroner Quackley" has formally suspended over our heads, the *lash* he deals in—"the law." The maladministrator of justice at Hounslow becoming the abuser of parliamentary privilege in St Stephen's, has publicly threatened private litigation, as the penalty of public discussion. He has "instructed his solicitor"—so he assures the Commons—"to file a criminal information" against us, for analysing—consistent liberal!—*his* doings! We smile at the menace, respecting no more the *exparte* threats and abuse of the indecorous senator than the *exparte* proceedings of the undignified coroner Be the law used or not we shrink not from our duty. At any risk and at any cost we will perform our pledge of holding up to the just rebuke of that efficient tribunal, public opinion, the curious idiosyncrasy in an English magistrate, which can turn a *medical* Coronership into an agency for professional degradation, extract the materials of judicial buffoonery out of the tragic incidents of a supposed assassination, and prostitute the most sacred uses of justice to the emergencies of political faction.

A fact to start with, which of itself gives the measure of this inquest's worth, is that the *medical* verdict of this jury, GUIDED by a *medical* coroner, is beyond all question *medically* false Poor White did not die of the lash, and there was not a scintilla of scientific evidence given to suggest that he could Every statement of Mr Wilson to that effect is not only suspicious and unproved, but actually *absurd* First The "be all and end all" of his scientific nonsense is a "*ruptured* muscle All his statements and theories, and "discoveries" depend on a "*rupture*" Is the rupture then visible to the naked eye or through the microscope? No It is not even pretended The assertion on which all rests is, after all, but a *supposition!* What is there, therefore, in favour of this strange supposition? How is the extraordinary fancy supported? Oh, a "*part* of the *lowest* line of muscles, about three inches in length, (*name* not given!") by *about* one inch and a half in *greatest* breadth, between a quarter and a half inch in thickness, and lying in contact with bones" was "disorganised," was "soft," was "pulpy!" So much for the proof of a "rupture"!" But then this patch of softened muscle, supposing it worth anything, is not detected during two post-mortem examinations, though conducted, the one by a party of three, the other by a party of two, surgeons—is not detected either by Mr Wilson, except during the forcible exclusion of the three surgeons most interested in seeing it if it could be shown, and finally, is not detected till seven days or more after the former post-mortem examinations, and till the *twelfth* day after the death, when, through the extreme heat of an extremely hot summer, the "softening" agency of decomposition has been allowed full time for doing its worst! In other words Mr. Wilson swears that the man was *killed* under medical surveillance, because, thirty-seven days after the flogging and twelve days after the death, the putrid body exhibits a patch of decomposition in a small "part

of the deepest line of a "*nameless*" muscle! It is quite true, indeed, that the man died, by the admission of all, of acute disease of the chest, to explain which there existed an extraordinary change of temperature; it is quite true that there was an effusion of serum in the thoracic cavity that the pleura costalis and pleura pulmonalis were joined together by coagulable lymph, and that all the indices of a recent violent inflammatory action were demonstratively present; it is quite true, too, that for days after the flogging and before the supervention of this acute disease, the poor man felt well, moved freely, and even worked in a stooping attitude, without any inconvenience from the disorganised state of this magically potent muscle, communicating with the pleura! It is quite true, moreover, that the muscles directly exposed to the lash, the muscles which cover and protect the supposed seat of disease, and which would have been necessarily the centre of spasmodic action if there were any, were "unruptured," untouched, nay, perfectly healthy; all this is quite true, but, nevertheless, as the small patch of pulpiness, by a bare possibility, might not be decomposition; as, by a bare possibility, it might have existed before death; as, by a bare possibility, it might have existed from the time of the flogging; as, by a bare possibility, it might have originated in a rupture; as, by a bare possibility, (at least in Mr Wilson's creed), it might have caused acute pleurisy and pneumonia,—this worthy gentleman—as the Coroner's perambulatory witness—could not hesitate to swear positively, against five positive medical opinions, that the flogging killed the man! In precise proportion to the difficulty of believing his *hypothesis* was his positiveness in swearing to it as a *fact*. The more absurd the fancy the clearer Mr. Wilson's affidavit: nay, so decided is his scientific *clairvoyance* under oath on such points, that he is not only sure that a "ruptured muscle"—received in flogging, too—killed the man, but that without that "rupture," nay, without that flogging, he would not have died of anything else! During twenty-seven days White was under a fatality to die of *nothing* but the lash!

Mr. Wilson's pulpy softening, and ecchymosed condition have their seat in some small muscle or muscles very indistinctly referred to. Now to us it appears more than strange that any practical man should expect that these small muscles could present a perfectly natural appearance in a subject which, during the lapse of several days, lay on its back under an almost tropical heat, manipulated in several autopsies by different persons, and subject to that well known law and source of error to unexperienced pathologists—the gravitation of blood to the depending surfaces, reddening even to a purple colour every part, from the cutaneous surface to the deepest tissue of the bone. We defy any one to proceed with such deep dissections, to remove four layers of muscle in succession, to carry a saw across the laminæ of the vertebræ, necessarily touching several of the pedicles known to abound with blood, and to say that a small ecchymosed spot found in the lowest layer—adjoining the bones cut through—seated in an almost tendinous muscle—a muscle rarely or never used after the period of manhood and not even demonstrated as a distinct muscle in any anatomical school in London—owed its origin to a cutaneous sympathy with so remote an event as the flogging—a sympathy which like the electric spark, becomes visible only at the two extremes of the poles, neither touching nor affecting the intermediate structure.

Every anatomist, perhaps,—if we except Mr. Wilson—is familiar with the fact that at all seasons, but still more in an unprecedently hot summer, the progress of decomposition in the human subject is frequently accompanied with the rupture of blood vessels, which pour their contents into the surrounding cellular membrane. Such extravasations meet us even in our daily animal food, in which the mode of death has expressly in view the draining the flesh of its sanguineous fluids, and there can be few cooks who have not, in hot weather, had ocular evidence that a muscular joint, especially if unprotected from decomposition by the process of cookery, will exhibit this "*putrilage*"—as the French term it—diffused through the membranous interstices of the muscles, accompanied by a state of decomposition, in the tissues the muscles themselves, under the form of a sanguineous jelly, more or less offensive to the senses. Now, it is clear, by Mr. Wilson's own testimony, that to a limited extent this extravasation and decomposition had taken place in and around the muscles; and it is by no means improbable, although of course it has been overlooked by Mr. Wilson, that the effusion in the first instance may have been partly or wholly derived from the vessels of the theca spinalis which we may safely infer from the accounts given, to have been congested as might indeed have been anticipated from the drunken habits of the deceased. It cannot be doubted, too, that the osseous structure of the vertebræ, naturally filled with venous blood, (in this respect resembling the cranium) would, on application of the saw to the *laminæ* of the vertebræ, pour out its fluid into the structure of the multifidus spinæ, (the muscle crossing the plates of bone implicated in the dissection), and thus cause that appearance of ecchymosis so prominently dwelt on in Wilson's post-mortem report. Such effusions are the well known agents that lend activity to decomposition, and they exhibit themselves in three stages or degrees—ecchymosis, or simple redness from turgescence of blood vessels, effusion from rupture of these vessels giving forth materials readily to be decomposed—and *putrilage*, when the decomposition invades and takes possession of the surrounding tissues. But between these cadaveric phenomena, which are simple, constant and universal, the never absent characteristics of animal putrescency—which Mr. Erasmus Wilson could not have failed to find in White's case if he had tried—between these phenomena and the vital physiological effects of flogging inflicted twenty-seven days before death, where is the affinity? On what possible ground can Mr. Wilson withdraw these well-known results from the causes to which they naturally belong to transfer them to a remote incident with which no connection, pathological or anatomical, can be established? Need we here pause to ask the Profession was ever mention before made of so extraordinary a pathology? What will be the feelings of the real anatomists of Europe when they learn that such anatomy and such pathology is taught in a London Hospital School? What will the medical *jurists* of the continent say when they learn that English magistrates have at call advertising anatomists, formerly their office clerks, ready to shape scientific evidence, after this extraordinary fashion, even when the reputation, and liberty and life of honourable men are at stake!

For our professional readers it must be a work of supererogation to point out Mr. Wilson's defective descriptions of the results of the autopsy. We have no hesitation in affirming most advisedly, and challenging for the fact any legal investigation Mr. Wilson may deem safe, that he could not have understood the elementary anatomy of the structures he professes to have examined. What *other* anatomist could have submitted to the public and profession a report so vaguely couched in support of a pathological discovery so extraordinary itself, and so grave in its possible results? We find it difficult to conceive how so many errors could have been crowded into so small a space, and yet allow room for at least half a dozen unscientific and irrelevant clap-traps, having no other object but to assist his friend Coroner Quackley in exciting popular feeling. In the face of extensive diseases of the thoracic viscera, he admits that his attention was "especially directed to the back and spine" in his post-mortem examination of the deceased. What is this but coming to the autopsy with the understanding that it was his business to find the cause of death in these regions? Are we then not prepared in advance to find that the foregone conclusion will be supported by any pretence, however flimsy, even if it exposes him that uses it, to the peril of standing to the nonsense as a scientific discovery? Can we be amazed that from the first instant of the enquiry he sets himself up in direct opposition to the five medical men that had preceded him? Is it extraordinary that in an elaborately got up document he uses language the most vague and indefinite to cover the insignificant pettiness of the grounds on which he proceeds? or that, driven by his very commission from the well-ascertained facts of sound pathology and physiology, he should seek, in some impossible and inconceivable action and change of structure in living fibre, those opinions which alone could answer the objects of his Coronatorial patron, and give efficiency and note to his own medico-legal evidence? In one word, from what other anatomist, or pathologist, or surgeon, in any *other* position, could the public have received such a post-mortem report as the following:—

"On raising the muscles, or flesh, from off the ribs and spine, I find a part of the deepest line of muscles, viz., that which lies in contact with the bones, in a state of disorganization, and converted into a soft pulp; in medical language, I should call this a pulpy softening of the muscles. The seat of this pulpy softening was the sixth

and seventh ribs, near their attachment to the spine, together with their intervening space, and the hollow between the sixth and seventh process of the spine. The extent of the disorganization was about three inches in length by about one inch and a half in greatest breadth and between a quarter and half an inch in thickness. In the space between the ribs the muscles had undergone this pulpy alteration, even so deep as the lining membrane of the chest, the softened muscles being in absolute contact with the lining membrane, that portion of the flesh which occupied the groove of the spine and had undergone a similar disorganization, was one of the little muscles known to medical men under the name of the multifidus spinæ. In addition to softening of this little muscle it was partly surrounded with blood. It was in a state medically called ecchymosed.'

We might leave such a description, and by an anatomical lecturer too, in the hands of the profession, without one word of comment. How peculiar the technical language! "A part of the deepest *line* of muscles, meaning *layer*, no doubt; that which "lies in contact with the bones, in a state of disorganization, and "converted into a soft pulp," a pulpy softening of the muscles"! There is no name—no description of the muscles. All is careful confusion and elaborate perplexity. Words are used to conceal ideas. Why is there no description of the spinalis dorsi? of the semi-spinalis dorsi? levatores costarum? of the external intercostal? What was the condition of the tendinous portion of the longissimus dorsi and sacro lumbalis—muscles above all others most exposed to the immediate action of the lash, and to convulsive action had there been any? We are told that "the seat of the pulpy softening was the sixth and seventh ribs, near the attachment to the spine." Is it meant that the ribs were *softened*? The language employed excludes any other meaning. We are again told that the pulpiness was "*near* their (the ribs) attachment to the spine." But as the ribs are attached by two points to the spine an inch apart from each other, we are entitled to ask, did Mr Wilson mean both attachments, or was he ignorant that there was more than one? Now, at and between these attachments the ribs have no connexion with the muscles spoken of. Nay, they are absolutely disunited by a particularly strong plate of bone, formed of the transverse process of the vertebra and its pedicle, interposed between the rib and the multifidus spinæ. Mr Wilson then adds the unintelligible phrase "together with their intervening space." We are anxious to know to what "intervening space" he alludes. Does he mean the intercostal space, external to the tubercle of the rib? But the multifidus spinæ does not lie there, and if such be the locality of that muscle in Mr Wilson's science, we wash our hands of this worthy lecturer on anatomy. The character of the profession itself would suffer by the needless exposure of such enormous ignorance. But, if he mean the space between the transverse processes of the vertebræ, he might surely have said so, but such a declaration would have been inconvenient—it would have tied the coroner's witness down to the multifidus spinæ, and would have precluded the necessity of *dragging in* or introducing a portion of the intercostal muscles.

The part which the "intercostals" are thus made to play, suggests the reflexion that one discovery is as much of calling for the backing of another as one lie, according to Goldsmith, is certain of drawing ten more after it. The first *discovery*, made too under the patronage of a *medical coroner*, is that a small *portion* of a muscle, whose action is instinctive, instantaneous, and entire, took on a convulsive action in opposition to the physics of respiration! The thing wanting was an explanation, which should trace the "pulpiness" home to the "convulsive action," and through that to the "flogging." Hence, *discovery* No 1. But *discovery* No 1 begot a new difficulty, to obviate which we have DISCOVERY No 2. For what—people asked—became of the corresponding muscle of the other side which must have undergone precisely the same amount of action? This was an obvious question, that the difficulty would have occurred to any one, always excepting, however, a *medical coroner*. We have, therefore, now DISCOVERY No 2, that two muscles, which all the world believed to act in unison, become, in this particular case, disassociated, and acted separately! But there was a third need, that of connecting the pleura with the diseased muscle. Hence DISCOVERIES No 3 and No 4. DISCOVERY No 3, that the small portion of the intercostal in immediate contact with the pleura! and DISCOVERY No 4, what we have already adverted to, that the *multifidus* spinæ, in a state of pulpiness, could influence, by contact or sympathy, the organ occupying a cavity separated from them by a massive column of bone! But the crowning discovery, DISCOVERY No 5 in the series, which must for ever establish this model lecturer's fame as the COLUMBUS of medical science, is, that the pulpy disorganization of the muscle, and with it the simple pulpiness—the acute inflammation of the thoracic viscera—took place precisely on the side least injured by the corporal punishment! We are aware that a blow on the right side of the head will give rise to paralysis of the left side of the body, and vice versa, but till the brilliant imagination of our modern anatomist had taken its full swing, we were wholly ignorant that a scourging on the right shoulder may be followed by a pulpy softening on the left side of the spine, having for effect acute inflammation of the thoracic viscera in the same region! But there is one fact recorded we will not contest; one item of this *lecturer's* anatomical science that *will* pass muster. The nerves, the organs of sympathetic action in the midst of all these crossing sympathies, and although the surrounding muscles were "*lacerated*," "ruptured," "disorganized," and affected with pulpy softening, "presented a healthy appearance"! Everybody knows that he is candid enough to tell us that the healthiness of the nerves does accompany the advanced stages of decomposition; that anatomists desirous of effecting clear and rapid dissections of the nerves, avail themselves of this well known law; and the only wonder is that a medical coroner and his "celebrity of anatomical science" should, with such self-evident and damning disproof before them palm off on an ignorant jury, as a discovery the natural and inevitable effects of cadaveric decomposition, as the results of mysterious vital phenomena!

To illustrate the scientific tendencies of this question we will just suppose Mr Wilson's course of action applied in another case. A patient labours under acute rheumatism. A blister has been applied between the shoulders by some professional opponent of the *medical* coroner. In the ordinary course of rheumatic affections, the disease seizes the membranes of the chest and heart. The patient, under violent change of atmospheric temperature, grows worse, and dies. Enter coroner's friend, Mr Wilson, the skin doctor, to make a post mortem examination, with instructions to direct his attention especially to the back and spine, five medical men having previously, on autopsy, certified positively that the death occurred from pleuritic inflammation. Not so, says Mr Wilson. My five professional brethren do not know their business. They have been long conversant, it is true with the application of blisters; and I admit that as yet I have not myself cognizance of the kind. But against their thirty years experience I set my *art* of making discoveries. The blister has a mysterious mode of action; few have guessed it. If it missed the first, and the second, and the third and the fourth, it seized on the fifth, or at all events on the sixth layer of muscles (minutiæ in such things are needless, or at least, inconvenient). These obscure muscles acted upon by still obscurer sympathies—the stronger because the further off—took on convulsive action; the convulsions produced "rupture" or "laceration" (the terms are synonymous); rupture gave rise to disorganization; disorganization to pulpy softening, pulpy softening to inflamed membranes, inflamed membranes (piercing a plate of bone) to pleuritic inflammation, and thus completing the circle of sympathies and reasonings, the blister killed the patient! Such is the reasoning of a medical coroner and his anatomical witness, a reasoning, which allowed or followed in *any* case of death occurring during medical treatment, would leave no practitioner, however skilful, free from perilous impeachment and loss of repute!

Long as have been our remarks, we cannot close this article without repeating, and, if possible, with more emphasis, every word of reprobation expressed in our former article on the judicial management of this inquest. We denounce the selection of Mr Wilson as a preliminary intimation of an outrageous partiality. His private intimacy with the coroner, though adroitly blinked to the jury and the public, was for years that of servant and master, mutual patrons and obligees. In any matter affecting the private or public views of his old employer, he was not an independent witness. The fact, too, stands undoubted that Wilson, as though he had secured the good-will of Wakley's medical fees at inquests, was the ambulatory surgeon generally called in by him, to the exclusion of the ordinary attendants, whenever professional testimony was required. The coronership, indeed, is a kind of partnership between them—its mileage fees going to

the coroner—its medical focus to his peripatetic *attache*. In other words the magistrate and the witness, like Peachem and Lockit, have a mutual interest in being good friend. Now, when three surgeons—two of whom were not implicated in the flogging transaction—had carefully made their post-mortem examination, published its minutes and given their decided opinion; and when two other surgeons, Messrs. Day and McKinlay, at the request of the coroner and jury had made a second post mortem examination, and overhauling the grounds of the former opinion, had given to it their deliberate confirmation; when five surgeons, differently placed, and carrying on their examinations under different circumstances had given a positive professional opinion, all in strict concurrence—we do say it was a gross libel on professional character, to scheme the contraversion of their united opinion by the testimony of one solitary explorer, set subsequently to make a new post mortem, and that it was perfectly outrageous that the [illegible] concocter of the affront should select for the purpose his own boon companion, [illegible]. The defence made that the [illegible] of the witness [illegible], even, *if true* would [illegible] in answer; for it [illegible] the part of a *medical* coroner to, without any shadow of ground [illegible] of the groundwork on which all [illegible] and character [illegible]. But we deliberately challenge proof that Mr. Wilson has established any claims to be acknowledged by the profession as distinguished either in anatomy or pathology. His "Healthy Skin" book is a work wholly popular in its character; and in its aims and tendencies [illegible], and we propose, in an early number, to show that his compilation [illegible] London lectures—[illegible] the medical science of our country. On no one ground, then, can we find the vestige of a reason for a [illegible] to the world, by the unsupported testimony of a private comrade, the mature convictions of five able and respectable surgeons!

[illegible] by the "*ill taste*" in *medical* [illegible] coroner and witness—of suggesting and submitting to so equivocal a step; passing by the stupendous [illegible] morbid animus of the medical Coroner who could listen with complacency and delight to the incongruous and ridiculous medical testimony purveyed to the jury by the gentleman they called their "*own doctor*"—passing by the unseemly exclusion of the medical witnesses during the whole of the first day of the inquest—passing by the [illegible] exclusion of Dr. Warren, when Erasmus Wilson, by *private* autopsy, was taking up in the putrid subject evidence which, unrebutted, might convict him of manslaughter, and the exclusion of Drs. Reid and Hall, whose professional character he had been *engaged* to undermine; passing by also, with many similar matters, the monstrous irrelevancies of enquiry and hideous buffooneries of expression and gesticulation that disgraced the judicial presidentship—let us be permitted to say one concluding word on the defence which this high minded and dignified Coroner made in the House of Commons when our accusations in a previous number were categorically read to him to the infinite satisfaction of his brother members. We own to a deep pity of the mental organization which could have set up such a defence. This hon. member of Parliament confessed that he had been compelled by us to go a begging from a poor attorney at Brentford for a certificate of his good conduct as an English magistrate, and the satisfactory "testimonial" was read to the House in due form and in all its plenitude. [illegible] that after such [illegible] humbleness, such [illegible] forcibly remind us of Newgate 'witnesses to character,' the honourable member should have exhibited the *spirit* and *good taste* of insulting a "*tupil Lawyer*," a minister connected with the medico legal department of this journal—[illegible] whom "*tupil*" he is—the *clever* [illegible] medical worthies, that "he hated of all the world the most, [illegible] It by [illegible] he means that sort of ability which can think it a triumph to fish out [illegible] of magisterial [illegible] "stroll" there [illegible] "*tupility*," which the Coroner thus [illegible] cultivates the better. But "Coroner Quickly" cannot but be at continue with truth [illegible] his conception of the cardinal qualities!

THE NATIONAL INSTITUTE.

Our readers will peruse with pleasure the details of the important meeting held on Wednesday evening. The harmony and general effect of the proceedings were most satisfactory; and we can not but augur the best results from so promising a commencement. All, however, lies in the hands of the profession. If they will not do their own work, they may be assured it will be left undone. From the late day of the meeting, and the crowded state of our columns, we must content ourselves this week with a recommendation to the perusal of the proceedings, and an earnest injunction to a general co-operation with them.

Iterum Iterum Iterumque.

OUR readers will recollect that, some months back, (April 11th,) we recorded, with comment the case of Geach versus Ingall,—an action brought for the recovery of a policy of insurance amounting to 2000*l*. For the third time, the case was tried at Warwick on Friday and Saturday last. The payment of the policy was resisted, on the ground that the individual was not in a sound state of health at the time the insurance was effected. He applied for admission into the Norwich Union Office and was declared by the late Dr. Ingleby of Birmingham a fit subject for assurance. He was afterwards advised to enter the Imperial, and was admitted into it after a careful examination by Mr. Wickenden, a surgeon of unexceptionable skill and character in Birmingham. Scott, the insured, died in 1843 of consumption, of which, in its incipiency, the company believed him to have been the subject, at the time of his admission. Hence the litigation. The evidence on both sides was of a very positive nature; though sundry of the witnesses for the defendant were somewhat straggling in their relative testimony. The question, altogether, turned upon spitting of blood, and its probable concomitants. The man was inquired of, as usual, at his examination, whether he had ever had spitting of blood, or other symptoms of disease in the lungs, and his answer was in the negative. Several of the witnesses, however, swore that he had spat blood both prior and subsequently to his admission. Of these witnesses his wife and various relatives were the chief. Certainly they, of all other people, ought best to know what common ailments the deceased suffered from; and doubtless their evidence would have carried considerable weight with it, but that there was every reason to believe it to be intentionally one sided. Scott failed, some time before his death, and his policy was bought by a party against whom the witnesses entertained no feelings the reverse of friendly. They were consequently not over particular either in making statements or sticking to them. After their examination, several eminent medical men, amongst whom were Dr. Tweedie and Mr. Lawrence, testified to the probability of the deceased having had tuberculous disease of his lungs at the time his insurance was effected. The witnesses for the plaintiff testified as strongly in an opposite strain. Many who had known him intimately for years, had worked with him, and slept with him, declared that they had never known him to spit blood, and that in all respects he was a "strong, wiry man." It seems that he could endure great fatigue without suffering from it, and had frequently sustained with impunity, considerable vicissitude and exposure.

The statements having been fully heard on both sides, the jury, with little deliberation, returned for the third time, a verdict for the plaintiff to the full amount of the policy.

We quote this case, because of its medico-legal interest, and of the uses it may possibly serve as a precedent in future similar litigations.

Without for a moment wishing to reflect upon the Imperial Office, we cannot help thinking that in the present case, they were guilty, to say the least of it, of indiscretion. The insured had been passed by the medical referee of the Norwich Union, before applying for admission into the Imperial, the medical officer of which, again, gave him an unqualified certificate of soundness. In a few years afterwards, the man dies after a not protracted illness, and an idle rumour arising in a family feud, about the deceased having spat blood, this is forthwith seized upon as a plea for the non-payment of the policy. And not satisfied with one verdict, it is brought before a jury three several times, at a cost which we apprehend will leave little of the 2000*l*. as a memento of victory.

As we have said, the whole question, or rather

quibble, turned upon the spitting of blood, and the probability of its connexion with diseased lungs. There was no direct evidence whatever, that the medical examiners could detect, or that the man's friends and fellow workmen had ever observed, of his tendency to pulmonary consumption. All that could be said of one party, not very distinguished for general good character or veracity, was, that the man had been known to spit blood,—not frequently, and never in profusion, but now and then, mixed with mucus, when he was suffering from ulcerated sore throat. Another party, that had for years been in almost daily communication with the man, swore that they had never observed any such thing. Certainly, with conflicting evidence like this, backed by the certificates of two competent medical men, it seems anything but an act of wisdom to send the case three times before a jury. But granting that the man had been seen to spit blood, this is no proof that his lungs were diseased. We apprehend that very few people pass through life without spitting blood some time or other. Very many people, in certain states of dyspepsia, or disordered general health, are as subject to bleeding from the gums, the mucous membrane of the mouth, the fauces, or the tonsils, as others, suffering from determination of blood to the head, are liable to bleeding from the nose. And if an ignorant bystander, seeing a man spit blood under the circumstances above mentioned, or after having picked his teeth, or chafed his gums, is to report the poor fellow the victim of hæmoptysis, and on this solitary ground an exception is to be taken to his health, and to the validity of his assurance, we expect very few to be safe. Any man, at this rate, might be made the subject of disqualification. In strictest language, the ejection of blood from the mouth is *spitting* of blood, no matter what the source of it; but this is not the conventional signification of the phrase, nor that to which it is strictly limited as the question of an insurance office. The expression bears relation to the origin of the effusion, not to its exit from the mouth. Spitting of blood, whether the term be popular or professional, is always understood to signify *hæmoptysis*—the expectoration of blood. This is precisely the sense in which it is applied in insurance questioning, for it is generally followed by—"or other disease of the lungs." Hæmoptysis is always regarded as very probable evidence of pulmonary disease, if it be not a vicarious function; and the inquiring concerning it, like other inquiries respecting coughs, expectoration, pains in the chest, &c., is not put on account of itself, (the hæmoptysis), but on account of the ailment of which it is likely to be a symptom. But to say that the mere fact of a man having spat blood is proof of his physical unsoundness, it being unknown from what quarter the blood proceeded, or what was the cause of its discharge, is about as rational as to charge a man with chest affection because he was known to have a violent cough, consequent upon having half choked himself with some beverage or other swallowed too hastily.

Yet an injustice of this sort has been perpetrated, and we fear often. Ourselves once knew a man refused admittance into an insurance office, despite the testimony of his own surgeon, and of the physician to the institution in his favour, merely because one of the clerks of the company deposed to having more than once seen the poor fellow spit blood. The fact was, they were in the habit of smoking a pipe together, occasionally, at the same tavern, and it was the custom of the individual in question to pick his teeth after having finished his tobacco, and that little dental operation was generally followed by loss of blood from the gums. The case of the sufferer was hard enough; for not only was he refused admittance into the office in question, but the other offices in the town, hearing of his rejection by the one aforesaid, refused him also, and he was therefore left utterly without the means of making the provision he desired for his wife and children. He was in truth a living illustration of the old proverb which speaks of giving "a dog a bad name." But bad as his case was, it would have been much worse had his idle story got afloat some time after his admission into an insurance office, and the company warned him to retire on pain of expulsion for having intentionally attempted to defraud them; or if, having been duly and honourably admitted, he had paid through a long course of instalment, and at last died, in obedience to the common law from which none are exempt, and the company having found out from some idle tale-teller the unworthy quibble in question, the widow and orphan children of this poor fellow had been deprived of their rights, and made paupers through the instrumentality of a little pot-house or street gossip. Such would inevitably have been the issue, had the man been placed in the circumstances above mentioned.

As we before said, we make no comments on the case upon which we base this article; but we cannot help thinking with the judge, and the jury, that two opinions could scarcely be formed upon it, and we sincerely hope, for the credit of medical jurisprudence, that we shall seldom have such litigation re-enacted.

A case like this, however, is one from which some useful hints may be derived. It would, perhaps, have saved the plaintiffs some trouble, had Scott, when questioned as to spitting of blood, have answered the query negatively, as regarded *coughing it up*, and positively, in reference to casually discharging it from his gums, palate, &c. We would, therefore, gladly take the present opportunity of advising all whom it may concern, to weigh well their words in the process of passing an insurance examination, and to let their answers be "the truth, the whole truth, and nothing but the truth." These valuable items provided, and being afterwards produced, will be the surest safeguards against private hostility or party injustice. It is better, also, that a man should have the testimony of his family surgeon, in addition to that of the medical officer of the company. This private testimony, duly authenticated and witnessed, he should keep by him as he keeps his will, to be used after his death in case its proof be necessary. We earnestly hope that the advice we now give will be followed by those to whom it relates. The trouble or inconvenience attending it, will be but little, and as we have just seen, it may save a multitude of annoyances and costs.

Medical referees, again, should learn from an example like this, the desirableness of exercising the severest scrutiny in their practical duties. Nothing that manipulations, observation, or questioning, can elicit, should be disregarded by them. They have a serious duty to perform to two parties, and they should discharge it scrupulously. Their great, nay, their only duty, is DIAGNOSIS; let them answer this *scientifically*, and neither themselves nor others need be apprehensive of the results. If the questioning be pathologically rigid, and the answers honestly exact, insured parties may feel perfectly satisfied as to the security of their policies.

FORMATION OF THE NATIONAL INSTITUTE OF PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

A well attended and highly influential meeting of general practitioners was held at the Hanover-square-rooms, on Wednesday evening last, to receive a report from the committee of the National Association, and to decide on the propriety of immediately forming a NATIONAL INSTITUTE OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY AND MIDWIFERY. Numerous gentlemen from the country attended and the meeting included most of the influential medical men in general practice in London and its environs.

The venerable president R. R Pennington, esq. having been unanimously elected to the chair, rose and was received with much cheering: he said.—

Gentlemen, I am so anxious to testify, by every act in my power, to the general Practitioners of this country, and to the members of the National Association in particular, how deeply interested I am in all that concerns them, that I have cheerfully consented to take the chair on the present occasion.

There is scarcely any personal sacrifice, that I would not readily have made rather than forego the pleasure of being here this evening, to participate in the proceedings of this meeting. I wish to stimulate, by the force and spirit of my example, as many as I can of my professional brethren to shake off their apathy, and to induce them to take an interest in what is going on in matters relating to the medical profession. I wish them also just to enquire into the principles of the association over which I have the honour to preside; and, if they will only take the trouble carefully and dispassionately to consider what it is we are contending for, I should not then at all despair of seeing all the intelligent and influential members of the profession, from one end of the kingdom to the other, come and enroll themselves as members of our body. Gentlemen, we are contending for the principle that medicine and surgery are educationally one and the same science, and that nine-tenths of the medical profession in this country are practising, and must continue to practise, on this principle. We contend that special institutions, for sectional departments of medical science, however valuable, can never supersede the necessity of an institution comprising, within itself, the entire range of medical and surgical knowledge.

We assert that a knowledge of pharmacy is an essential element in medical education, and that the large amount of responsibility involved in the practice of pharmacy renders it desirable that it should continue in the hands of medical practitioners. Society has decided that it should be so and medical men have no right to insist that it should be otherwise. We in no way admit that the practice of pharmacy should imply professional inferiority or that it is incompatible with a high standard of general and scientific knowledge. The National Association was formed to protect the interest of the Public and of the Profession: to secure to the former an enlightened and intelligent body, to administer to the maladies of all classes alike, and to attain for the latter that rank and position their extended sphere of usefulness so fully entitles them to occupy.

Gentlemen, it is to perpetuate the National Association, to carry out more effectually the objects for which it was formed by giving it a more permanent character, that we have assembled here this evening. It will be proposed to you in the report from the committee appointed to ascertain the sentiments of the profession on the subject, to declare the formation of a NATIONAL INSTITUTE OF MEDICINE, SURGERY, and MIDWIFERY.

I doubt not your ready acquiescence in the recommendation of your committee.

For my own part the plan has my entire and perfect concurrence, and I look forward with confident hope that through its means and the able and judicious conduct of those gentlemen to whom will be deputed the management of the Institution, we shall finally succeed in our objects.

REPORT.

A General Meeting of the National Association was held on the 17th day of April 1846, when it was unanimously resolved, that in consequence of the indefinite postponement of the settlement of the Medical question in parliament, an absolute necessity existed for the general practitioners of the kingdom to maintain a permanent collective organization; and that the National Association of General Practitioners in Medicine, Surgery, and Midwifery, should be established on a more permanent basis. The Meeting also resolved, that the members of the association and other members of the profession should be canvassed as to their willingness to co-operate in the formation of a "National Institute of Medicine Surgery, and Midwifery" upon the plan which had been fully discussed and agreed upon by the association.

The committee were requested to continue their functions for the purpose of carrying out these resolutions, and of again calling a General Meeting to report to the association and to other members of the profession on the formation of such a National Institute.

Your Committee proceeded, with as little delay as possible, to forward to each member of the Association a schedule containing the necessary inquiries, of which a copy is subjoined, accompanied by a circular letter dated the 27th of May, 1846, setting forth the plan and objects of the proposed institute.

One thousand, three hundred and thirty-seven of these schedules have been returned; and out of this number one thousand two hundred and eighty-eight gentlemen have expressed their willingness to co operate in the formation of the National Institute upon the principles and for the objects detailed in the circular letters alluded to.

The letter was framed from the report adopted by the members of the Association at the meeting of the 17th of April, and the committee take this opportunity of reminding the members that the objects of the proposed National Institute are in strict accordance with those which first called the National Association into existence, as follows:—

I To form a complete organization of the general practitioners of medicine, surgery, and midwifery, in a representative institution, on a permanent basis, with an authoritative council for the purpose of watching the course of medical affairs,—of advising the members of the nature and bearings of any legislative changes that may be proposed,—of taking such steps thereon as the circumstances of the profession may demand, and generally of protecting the interests of the qualified practitioners and of the public in all matters that relate to medical legislation.

II. To adopt a comprehensive and well considered code of bye-laws, for the government of the institution, calculated to produce harmony of sentiment and unity of action among the members; to discourage, as far as practicable, discreditable acts in connexion with the practice of medicine, and thereby to promote the true respectability of the great body of the profession

III. To promote a high standard of education and qualification, with a satisfactory test by efficient examinations, for every individual authorised, by law, to practice medicine, surgery, and midwifery. In furtherance of this object, to encourage the Apothecaries' Society to prosecute their duties with increased zeal, and to continue to elevate the character of their examinations also to watch, from time to time, the standard of qualification for the membership of the College of Surgeons, and, if found to be insufficient, to adopt such measures as may be best calculated to promote the efficiency of the member to practise surgery as a general practitioner.

IV. To use every practicable and legitimate means to expose, discourage, and suppress illegal and unqualified practice. In the absence of any legal registration, to publish, or to further the publication on authority, of a complete register of the qualified practitioners in actual practice, hereby giving facilities to the Society of Apothecaries for prosecuting those who may render themselves amenable to the law

V To carry out as far as the funds placed at its disposal may permit, those professional and social objects which have been found so advantageous to other collective bodies of educated men, among which may be enumerated;—the formation of a library,—the collection of a museum,—the occasional publication of transactions,—the opening of reading and lecture rooms and of a common hall,—and the establishment of prize essays and public examinations on specific subjects. By such means to enlist the zeal and ability of the great body of the profession in the cause of medical and general science to perpetuate their labours and experience, and to facilitate direct and friendly communication between the central council, the local secretaries, and the members of branch associations.

VI To employ all legitimate means for the purpose of urging upon the Government and the Legislature the claims of the general practitioners of this country to corporate rights, and to an Act of Parliament securing to the public a high standard of qualification and competency for every individual allowed by law to practise medicine, with protection against unqualified pretenders; and to the profession at large, those rights and privileges for which they have so long contended.

VII. To constitute a body competent to negotiate with the Government in the event of the Right Hon. the Secretary of State for the Home Department redeeming his original pledge to grant the general practitioners a charter of incorporation.

The 1288 gentlemen who have agreed to take the initiative in the formation of the National Institute, have furnished the committee with their names, addresses, and professional qualifications, and they have intimated their willingness to become members, and to join in such annual contributions, as may be necessary for the maintenance of the Institute.

The correspondence, in which your committee have been engaged on the subject of the formation of an Institute, has made them acquainted with several causes, which have induced some of the members of the association to withhold for the present, the return of their schedules.—Many have done so in consequence of the uncertainty, which exists, as to the amount of the annual contribution; others have expressed a desire for various reasons to await the actual formation of the Institute, and a few have declined the responsibility, until they are assured that what they themselves consider to be a sufficient number of individuals shall have joined it. From the circumstance, that a large majority of the returns which have come to hand, are from gentlemen possessed of a double qualification, and from other information, your committee have also reason to believe that some members of the profession having a single qualification, withhold their names, owing to a misapprehension of the intentions of the association. It will be seen by reference to the plan, the intention is, that the Institute should embrace all who are in actual practice as general practitioners, whether possessed of one or more qualifications from any of the existing colleges; and who are favourable to the founding of a new institute, upon the broad principle, that medicine and surgery are one science; and provided they join the Institute within six months from the date of its formation. After that period the qualification for the membership of the Institute will rest with the council, and the laws and ordinances hereafter to be enacted, which must be in strict accordance with the fundamental principle of the Institute, viz: That every general practitioner shall give evidence of his education and qualification to practise medicine, surgery and midwifery.

Although a large number of members of the association have not at present made a return, several highly respectable members of the profession, not being members of the Association have applied for schedules, and have returned them with an intimation of their desire to become members of the National Institute. Under these circumstances, your committee have deemed it expedient to call this meeting without further delay, for the purpose of declaring the formation of the "National Institute of Medicine Surgery and Midwifery." The committee regard the prospect of the new institution, as respects its numerical strength as most encouraging. They have no reason to doubt that the bulk of the members of the National Association will ultimately belong to the Institute, and they have reason to believe that the great body of general practitioners of this country, will eventually enlist themselves in its ranks.

A large majority of the returns are in favour of there being no distinction between the metropolitan and provincial members, as respects the annual payment for the support of the Institute, and a similar majority is in favour of that payment being fixed at one guinea. As it appears to be important that this question should be settled as far as may be practicable, the committee recommend that the annual contribution should be fixed at this amount.

Your committee in their former reports, have entered so fully into the business of the Association, and the various details of medical affairs, that they do not now deem it necessary to detain the meeting with any lengthened statement.

As respects the income of the National Institute, it is obvious that 1288 guineas per annum, would not be adequate to carry out the whole of its objects, it will accordingly be the duty of the first council, to regulate their proceedings with a strict regard to economy; to limit the operations of the Institute according to its funds, and to pursue those objects in the first instance, which are most essential to the interests of the general practitioners, and especially to the obtaining to their corporate and political rights. In proportion to the number of members, and the amount of the annual income the remaining highly desirable objects may be attained.

Since the last meeting of the association a great political change has taken place, and your

committee are willing to regard it as favourable to the interests of the medical profession, and more especially to those of the great body of general practitioners. A ministry standing avowedly on the principle of social improvement, through the education of the mass of the population, cannot for one moment desire to evade the question of medical reform, however difficult and complicated. It is apparent that a high standard of education, and qualification for every individual undertaking the responsible duties of a medical practitioner, ought to constitute the main feature of that reform.

It will obviously be one of the earliest duties of the council of the National Institute, to place themselves in communication with the Government, and as an organized body, representing the interests of the great mass of medical practitioners throughout the kingdom, to avail themselves of their position, for the purpose of accomplishing, by every legitimate means, such alterations in the scheme of medical politics, as may protect the public from unqualified practitioners promote the welfare and security of the community at large, and sustain the honour and respectability of the profession.

(Signed)
JOHN NUSSEY, Chairman.

COPY OF THE SCHEDULE.

GENTLEMEN,

I beg to forward my replies to the following Questions:

1. Are you willing to co-operate in the formation of a National Institute of Medicine, Surgery and Midwifery, upon the plan detailed in the accompanying letter, by becoming a member, and contributing towards its support?

2. That the committee may be enabled to estimate the sum at which the annual contribution for the support of the Institute should be fixed, what is your opinion as to the amount of such payment by the metropolitan and provincial members respectively?

For Metropolitan Members
£ s d

For Provincial Members
£

UNLIMITED?

3. At what period after the date of his qualification to practise should a member of the new Institute be eligible for a seat in the council?

10

I am,
GENTLEMEN,
Your obedient Servant,
Name
Residence
Qualification

To the Committee of the National Association of General Practitioners in Medicine, Surgery and Midwifery,
294, REGENT STREET.

Mr. Martin of Reigate then rose and said that he felt himself highly honoured by being entrusted with the resolution he held in his hand viz, "that the report just read be received." He could conceive no matter of greater importance to the profession generally, as well as to the public at large than the formation of the National Institute which had been proposed to the meeting. He could not doubt of the unanimous reception of the report, therefore he should not take up the time of the meeting by any observations respecting it.

Mr. Burnett of Alton had much pleasure in seconding the resolution, which was then put from the chair and carried unanimously.

Mr Clifton of Islington had felt peculiar pleasure in receiving the resolution entrusted to him to be submitted to the meeting. He believed that the step now to be taken would be well fitted to form the basis of a new state of things in the medical profession. It had long been the reproach of the general practitioners that they had not kept the public position due to them. He must attribute this to their confining themselves to the support of science and the advancement of the scientific part of medical practice without meddling in public matters. Gentlemen belonging to the medical profession had not remembered the old and true adage that 'union makes strength.' For his own part he believed that the formation of the Institute would be the foundation of an institution that neither statesmen nor others would be able to treat with contempt. He believed that for the future a new light would dawn on the profession and that it would assume its proper status in society. He believed too that the advantages from the formation of the National Institute would be such as to benefit the community at large. General practitioners had hitherto had much to complain of, they had been repudiated by the college of physicians and insulted by the college of surgeons, but they would be found to constitute a body able to maintain their position among the scientific men of all countries. As a proof of this he would instance the periodical medical literature of the day, supported almost solely by general practitioners, and then ask if the general practitioners were not able to maintain their position. He looked forward with much hope to the council which was to be elected, and to the standing which they would occupy in the medical world, both individually and collectively. This council would be able to come forward with their claims on the government and they would not be repulsed. They would form an organ by means of which the wrongs of the general practitioners would be redressed. He felt that the practitioners to whom the health of the country was entrusted, were entitled to all they had asked, and he had every reason to believe that the ends they sought, were calculated to promote the interests of society, by placing the value of scientific medical practice more prominently before the public, and discouraging charlatanism. Great is the truth, and it must ultimately prevail. One thing, however, he wished to impress upon the meeting; it was that not by all they should obtain, nor by all they could demand, would they elevate the profession permanently in the esteem of the worthy, without raising the standard of medical knowledge, and encouraging honourable conduct among themselves. He would no longer detain the meeting, except to read the resolution, which he had no doubt would be received unanimously.

Resolution 2.—That this meeting hereby declares the formation of a "NATIONAL INSTITUTE OF MEDICINE, SURGERY AND MIDWIFERY" upon the plan approved by the meeting of the national Association held at the Hanover Square Rooms on the 17th of April 1846, and with the objects recited in the Report just read. That the Institute consist of those gentlemen who have already signified their intention to co-operate in the formation of the same, with such other qualified practitioners as may join within the specified time, or who may become members in accordance with the future arrangements of a regularly constituted Council.

Mr. Fuller of Piccadilly, said that what Mr. Clifton had just told them had been said so much the purpose that he should not trouble them with a single remark except to impress on them the importance of the act they were about to perform. They were about to establish an institution that would overshadow the land and the benefits of which would be felt by all in the kingdom. He was old enough to remember the state of the profession before the passing of the Apothecaries, act of 1815, and he could recollect the position held by medical practitioners, before that period. General practitioners had proved to the world that they were an educated body of gentlemen who were both physicians and surgeons, and as such able to practise all branches of the profession. The late secretary of state asked what position the general practitioners held, the formation of this institution would prevent such a question from being necessary for the future. Mr Fuller would conclude by heartily seconding the resolution before the meeting.

The resolution was then put from the chair and carried unanimously with much applause.

Mr Propert had much pleasure in coming forward to propose the resolution he held in his hand. The meeting had heard so much of the advantage to be expected of the association from Mr Clifton that he had only to say he believed that the profession in future times would look back on this association with feelings of pleasure and gratitude. The resolution he held was one of the most important of the night,—it was respecting the sinews of war. The question of the amount of annual contribution had been put to all the members of the Association and the answers had been unanimously in favour of an annual contribution of one guinea each member with no difference between country and town members. He would read the resolution he had to propose to the meeting.

Resolution 3.—That in accordance with the recommendation of the Committee, it is the opinion of this meeting that the annual contribution for the membership of the National Institute should be fixed at one guinea.

He wished however to correct an erroneous impression which might get abroad; the profession must be aware that heavy expenses would attend the formation of the institute, and although the annual subscription was fixed at one guinea, all contributions from the more wealthy members of the profession would be received most thankfully. They had a large institution to form, and a museum and library to collect and consequently their expenses must be heavy.

Mr. Septimus Reid had much pleasure in seconding the resolution, which was then put from the chair, and carried unanimously.

Mr. Smith felt great pleasure in proposing the fourth resolution which he would read to the meeting.

Resolution 4.—That those Members of the Provisional Committee who have expressed their willingness to join the National Institute, be requested to proceed with the Enrolment, and to call a meeting of the Members of the National Institute, at as early a period as possible, that the necessary steps may be taken for the election of the Council and the officers.

It was an important feature in the institute that the direction and government would be alone vested in the body of which it was formed. For what reason had they formed that association? Mainly because the general practitioners of the whole country, and of the whole world, the men who were called in in all parts of the world had been grossly insulted by the college of surgeons. He had some difficulty at first in persuading himself to join the association because he had felt unwilling to leave the college of surgeons, but the council of the college had themselves severed the bond. Was it not monstrous that the members of a body who had been certified to be surgeons should be told by the very parties certifying that they were only fit for the ordinary exigencies of surgery? Who the pure surgeons? They did not exist, or if there were one he ought to be turned out of the profession. Many of the men who had been still looked up to as the heads of the profession were imbued with general science. He, Mr. Smith, knew a surgeon, a hospital surgeon, and one for whom he entertained the greatest respect, whom he once saw write a prescription; he afterwards told that surgeon that there was a decomposition in his prescription. It had been the fashion to vilify the apothecaries company, and in connexion with this he would mention a fact, Dr. Elliotson, a man, perhaps, led away by peculiar views, but still a man imbued with general science, had asked him, Mr. Smith, when in 1827 he presented himself for examination before the apothecaries company, to give him an account of his examination. He had done so, and Dr. Elliotson had then said, "if these are your examinations, the college of physicians must advance the standard of their education, or you will tread on their heels." The general practitioners had submitted to what a large number of the fellows of the college of surgeons had never submitted, and this was the reason that made him (Mr. Smith) first join the association. If unable to prevail with the executive government, it still remained for the association to advance the standard of their education, till they not only trod on the heels of the colleges, but actually tripped them up.

Mr. Harper fully concurred in the remarks of Mr. Smith. He had much pleasure in seconding the resolution. The resolution was then put from the chair, and carried unanimously.

Dr. Webster was happy in being able to do anything for the advancement of his profession. He had not been present in the last two or three meetings of the association, but he was rejoiced to find the resolution he was about to read put into his hands.

Resolution 5.—That henceforward, the interests of the National Association of General Practitioners be intrusted to the Council of the National Institute of Medicine, Surgery, and Midwifery—their principles and objects being identical.

He was unwilling that the association which had been founded for important purposes should die, and he felt much satisfaction in being present at its crowning work. It had been said that there was no necessity for a third body in the profession; but a third body was wanted, because the physicians and surgeons were special bodies, who were not qualified to act generally. Dr. Webster hoped that the days were now past when the surgeon, with Sir Astley Cooper, could "thank God that he knew nothing of physic." He would like to see the man who could, with any truth say he was a pure surgeon; he would place him in their Museum, and keep him as a natural curiosity. He would be sorry to see the day when pharmacy would be separated from the practice of the general practitioners, for his part he would be sorry to trust his prescriptions to the druggists of the present day. In Scotland practitioners all dispensed their own medicine, even the highest, as Gregory, Abercrombie, Russell &c. Dr. Webster looked on his country brethren as the true general practitioners. Medicine and Surgery could only be considered as one Science and indivisible and Dr. Webster thought perhaps that the general practitioners of the metropolis did not cultivate sufficiently the use of the knife. Dr. Webster needed not to say that he should give the formation of the institute his most cordial support.

Mr. Wallace in seconding the resolution wished to make a few remarks on one portion of the scheme; he alluded to the election of the council governing the new institute this was to be elected on the representative principle. The complete organisation of the medical profession was a great step, and one that could only be rendered permanently secure by the establishment of the representative principle.

The resolution was put from the chair, and carried unanimously.

Mr. Clifton wished to advert to the fact that the National Association had now been in operation two years. He had had an opportunity of observing all the proceedings of the body, and the result of his experience was the highest estimation of the characters and attainments of the gentlemen he was about to name. He felt the most lively pleasure in proposing a very small instalment of a very heavy debt of gratitude to their honoured secretaries, Messrs. Bird and Ancell. He felt that any encomium of his own on these gentlemen would but ill express the feeling of the profession towards them.

The association had never had occasion once to retrace its steps during the long period of its existence, and that was saying a great deal of a very large public body of gentlemen unaccustomed to business, and he felt that it was entirely due to the tact of the two gentlemen who had managed the affairs of the association. It rarely occurred that two gentlemen associated in such a work worked together so well. He might well say that what the one wanted, the other supplied. He had the most lively pleasure in proposing the resolution he was about to read to the meeting.

Resolution 6.—That the particular and grateful thanks of this meeting, be presented to the honorary secretaries, Messrs Bird and Ancell for their unparallelled and devoted exertions in the cause of medical Reform; for the zeal and ability with which they have discharged the arduous and important duties devolving upon them and for the kindness and urbanity they have uniformly evinced, in their Communications with the members of this Association.

He would only add that he hoped the resolution would be carried by acclamation.

Mr. Headland had much pleasure in seconding the resolution. He had had abundant opportunity of observing the great judgment and tact of the gentlemen who had given their service as honorary secretaries. Indeed he felt it would have been impossible to have found two gentlemen who would have conducted the affairs of the Association with equal zeal, prudence and skill.

A gentleman in the body of the room, whose name we did not catch, but who stated that he was not a member of the committee, wished to say a few words in support of the resolution. He said it became every one, when an opportunity offered, to express his gratitude to the gentlemen who had given up their invaluable time to the affairs of the association. He believed it impossible for any gentleman who had not taken a prominent position in the movement to appreciate the value of their services or to be aware of the skill with which they had smoothed all differences of opinion in a Committee comprising one hundred members, and the urbanity and kindness they had displayed on all occasions. The resolution was carried by acclamation.

Mr. Bird felt totally unable to express his gratitude for the encomiums which had been bestowed on the services of both himself and Mr. Ancell. That there had been great demands both on their time and attention, it would be affectation in him to deny; but when he saw some gentlemen, such as their venerable president, leave the retirement of private life and come into the turmoil and agitation of a public controversy for the benefit of the profession of which he was at once the ornament and the friend, men with hearts like his own, could not stand by and idly refuse to co-operate. There were two periods in a medical man's life when he might justly avail himself of any honourable means for attaining a prominent position in the estimation of his professional brethren—the one in the outset of life, with the buoyancy of youth and a praiseworthy ambition to assist him in his onward career, and the other at the period of his decline, when a lengthened experience could be advantageously devoted to the service of his professional brethren. Neither of those periods applied to him; notoriety he did not desire; his position in the profession was already formed, that position he had long continued to hold, and to the unostentatious performance of his professional duties he wished, when the association should no longer need his services, quietly to return. He wished before he sat down to express his feeling of the mode of which he had been assisted by his colleague Mr. Ancell. The untiring zeal, great ability, and perfect disinterestedness of his respected colleagues' labours fully entitled him to those marks of approbation so liberally bestowed upon him by the meeting. He wished also to say a few words respecting the gentlemen of the committee with whom he had been associated, gentlemen brought together from all parts of the metropolis, and from all parts of the country without the slightest previous concert or knowledge of each other; and if their gentlemanly bearing, their able and judicious management, and their temperate and dignified conduct throughout all their proceedings, might be looked upon as a type of the council of the proposed Institute: then indeed he could safely predict that the new institution would, under the direction of such a council, speedily reign paramount.

Mr Bird concluded a very affecting address amidst much feeling.

Mr. Ancell in returning thanks, stated that he had not willingly entered the arena of medical politics. Until the last two years, he had never taken an active part in any political matters, medical or otherwise, and it was a subject of some regret, that those who first induced him to act in public, when he differed in opinion from them, or rather when those with whom he acted differed in opinion, they were the first to turn and abuse him. The agitation and turmoil of politics, was quite inimical to his usual habits and pursuits. Those who knew him, were well aware, that in the absence of the best opportunities, he had still used his endeavours to contribute his mite towards the advancement of the science of the profession, the interest of which he had at heart. It would be affectation to say, that the interruption by recent events in those pursuits and objects, which he had made the business of his life had not been an inconvenience to him; but he begged to tender to the gentlemen who had brought forward the resolution, and to the meeting his grateful thanks for the handsome manner in which his services had been acknowledged. He considered the approbation of his conduct, thus expressed by his professional brethren, an ample reward for any trouble or inconvenience to which he had been put. In common with other members of the college of surgeons, he certainly did feel aggrieved when he found the door of that college, which the members might call their own, virtually shut against them; although personally he was very indifferent about it, for he was certain that a professional reputation did not depend upon the distentions, arbitrarily drawn, by the council of the College of Surgeons. Members of the college of his own standing, and his juniors had reasons to be grateful to their venerable president, and to let the senior members of the profession, who had so handsomely come forward with their time, their influence, and their purses; they could have no personal interest, whatever in any changes that may be effected in the profession, and they have stood forward in the most handsome manner, for the benefit of their professional brethren. He was happy to hear Mr. Webster speak out on the subject of the medical practitioners, dispensing his medicines; and he might be permitted to remark further, that we are engaged in a war of opi-

sions. At all events the colleges employ their influence in high quarters, to induce the belief that they are opposed to the practitioner dispensing his medicines, and to what has been called a third estate in the profession. But the fact is not so, they are not opposed to a third class, but they are opposed to the present educated class of general practitioners. They wish for a third class' but they desire the pharmaceutical society to take the place of the present class of general practitioner. He recommended his professional brethren not to relinquish the dispensing of medicine, at all events in the present state of the law. He might enter at large upon the topics of medical reform, but they had so often been discussed in public, and in committees and sub-committees, and also with deputations from different sections of the associations, and these discussions had always terminated in such perfect uniformity of sentiment and action that it would be only a trespass on the time of the association to do so, and he would conclude by again returning his grateful thanks to the meeting for their resolution.

Mr. Cooper then said, that there was one subject to which he wished to call the attention of the meeting—he meant the bill, now before parliament for the registration of the profession. He was cognizant of the fact that the colleges of physicians and surgeons had bestirred themselves against this bill, which they considered an infringement of their rights. He would therefore propose that a sub-committee should be formed to watch the progress of the bill, and to guard the interests of the general practitioners. He believed that the bill was intended merely to provide for the formation of an alphabetical list of the gentlemen in actual practice throughout the Kingdom. It had been suggested, that the bill would not go through the house. He could not agree in that opinion. He did not believe the bill had been shelved, but if, as it had been suggested, it were really dropped, the committee would of course be dissolved. If on the other hand, the bill were really carried on, the committee would watch the interest of the general practitioners.

Mr. Clifton thought there could not be two opinions respecting the advantages of a complete registration of the profession, but at the same time he must declare that he thought some of the provisions of the bill were dangerous. The committee had, immediately they got the bill into their hands, taken its clauses into consideration, and had immediately transmitted resolutions respecting it to influential quarters. It had therefore already been fully discussed by the committee.

Mr. Cooper had heard nothing from Mr. Clifton to convince him that the bill should not be then discussed.

A gentleman whose name we did not hear, said that he must request Mr. Cooper to withdraw his resolution; he was unwilling, unnecessarily to hamper the committee by the appointment of additional sub-committees.

Mr. Woolridge of Southampton, had only received the bill yesterday morning, but it appeared to him, that one of its provisions would prevent a member of the Apothecaries company only from ranking as a surgeon, he must say he objected to this as he thought it would tend to disturb still more the already divided state of the profession.

Mr. Clifton would, if the chairman thought this a proposition which could be discussed by the meeting, immediately read the resolution passed by the committee after considering the bill.

Mr. Smith thought that this question was simply one of confidence in the committee; the committee had already considered the bill, and made a representation respecting it in proper quarter. He considered that this was a question, which could not be discussed by that meeting which had been called for a special purpose.

Mr. Cooper should leave the matter in the hands of the chairman.

The question was put to the chairman, who decided that the meeting having been called for a special purpose, a discussion on the bill would be out of order.

A vote of thanks to the chairman was then proposed, seconded, and carried by acclamation, and the meeting separated. The greatest unanimity prevailed throughout the whole proceedings.

Miscellaneous Correspondence.

THE HOUNSLOW FLOGGING CASE BY JOHN HALL M.D., STAFF SURGEON FIRST CLASS.

To the Editor of the Medical Times.

Sir,—Much misconception appears to exist regarding the case of the unfortunate man Frederick John White, which has lately been investigated by a Coroner's Inquest at Hounslow; and as the Coroner has throughout the investigation endeavoured to throw discredit on the medical men connected with the army, perhaps, you will afford space for the accompanying statement which I drew up with a view of refuting Mr. Wilson's novel doctrines, and of explaining the reasons why I thought White's fatal disease was more likely to have been occasioned by exposure to atmospheric changes after exertion, than by the flogging which he received on the 15th of June, and from which he had recovered.

Mr. Wakley interrupted the reading of the paper by other matter, as I expected; and I cannot say that I regret the interruption so far as the Jury were concerned.

I am, Sir,
Your most obedient Servant,
John Hall.

Thursday morning 6th of August 1846.

REPORT DRAWN UP TO BE READ AT THE INQUEST, BUT INTERRUPTED BY THE CORONER.

After a careful consideration of all that I have heard stated concerning the case of White, I am still of opinion that inflammation of the heart, lungs, and pleura was the immediate cause of his death, and I cannot, with satisfaction to my own mind, connect it with the punishment which he underwent on the 15th of June; nor can I subscribe to the novel doctrine which has been advanced by Mr. Wilson for that purpose; and if you will permit it, I will briefly state why.

Mr Wilson states, that, on cutting down on the opposite side of the spine to that on which the integuments had been removed at the first post mortem examination, he discovered pulpy softening of the deep seated muscles to the extent of three inches in length, and one inch in breadth, but the superficial muscles over the part were all free from injury or change. He does not ascribe this changed condition of the deep seated muscles to the direct violence of the lash, as they were protected from that, by their position, and by the super-jacent parts, but to excessive contraction during the agony of punishment, and subsequent disorganizing inflammation from nervous depression.

Now White was in the prime of life, and does not appear, by the statements we have just heard read, to have suffered much from nervous depression. It is strange, therefore, and unaccountable to me, why nature should have made no effort to repair this injury, or that her efforts should have been of a disorganizing kind in this particular spot, while the process of healthy reparation was proceeding rapidly in other parts of his frame. The injury itself, too, is one of a novel kind, and difficult to reconcile to our pre-conceived opinions of the power and action of the small muscles alluded to. White, the witnesses all say, bore his punishment without any struggling, and Dr. Warren says he observed no spasmodic action of the muscles of the spine. Besides, had Mr. Wilson ever witnessed the infliction of corporal punishment he would have seen that it is the superficial layers of muscles, which attach the shoulder blades to the spine, that are thrown into action, and had any rupture of muscular fibre taken place from violent contraction, it would most likely have occurred amongst these, and not among the deeper seated on a along the spine, which have such limited contractile power, and are so well protected from injury.

Mr. Wilson lays much stress on the injurious effects likely to have been produced by this altered portion of muscle lying in contact with the intercostal spaces, but it seems to have escaped his recollection, that the cavity of the chest on that side was filled with diseased and disorganized viscera, and highly putrid fluids which were much more likely to have contaminated the adjacent muscles than that the small portion of pulpy fibred, should have occasioned the extensive disease that was discovered within the chest. The only wonder is, after eleven days exposure of the body at this hot season of the year, that the change of structure was not still more extensive.

Mr. Wilson states that he has dissected, or examined from five hundred to one thousand bodies in the course of his professional researches. I have also served much in warm climates, where deaths are unfortunately very common, and decomposition of the body after death very rapid, and I should say from Mr. Wilson's description, that the change he observed, was merely the first stage of putrefaction, and the ecchymosis around the small muscle nothing more than venous transudation which is apt to take place in congested parts. I regret that I did not witness these changes; and I here repeat my protest against the order which you gave for our exclusion from the examination. You say that you issued that order at the suggestion of the jury, and I was surprised to hear you admit that on the unfounded suspicions of others, you consented to wound the feelings, and attempted to lower in public estimation, the characters of two medical officers of her Majesty's service, as honourable and independent in principle as yourself; and certainly as unprejudiced and disinterested in this inquiry, as any one of the jury.

The first examination of White's body may be called a public one, as I was sent down from London by Sir James M' Gregor's express order to be present at it, and I brought Dr Reid along with me. Had a dozen medical gentlemen wished to be present we should have made no objection, but, on the contrary, should have been delighted to have had the benefit of their opinions.

The second examination was made at your suggestion by a gentleman of honour and known respectability in this neighbourhood, selected by the jury themselves. That examination Mr. Day has told you he had every facility afforded him of making, and he was uninterrupted, as no one, not even Dr. Warren, the surgeon of the regiment, attended; and the only professional person present when he made it was Mr. Mc Kinlay his own partner. So that he had a fair opportunity, the most prejudiced person will admit, of ascertaining the truth.

But when by anticipation you judged the medical evidence inconclusive, and decided on subjecting the body to a third examination, and gave directions to have it exhumed for that purpose, the question assumed a very different aspect. And I think unprejudiced people will say that it would have been more in accordance with our notions of English even handed justice, had you, in place of appointing Mr. Wilson, a personal friend of your own, and Mr. Day the nominee of the jury, either allowed the medical men of the army to witness the proceedings, or named a committee of three medical gentlemen quite unconnected with either you or the case. As the case now stands a private examination was made, and Mr. Wilson drew up a memoir concerning it, *without even consulting his associate*, and Mr. Day has told you himself, that, with the exception of the softened muscle which he observed, he does not agree with Mr. Wilson.

Mr. Wilson's memoir, I admit, is drawn up with ingenuity, but of the truth and value of the novel, physiological, and pathological doctrines that it contains, the medical profession will be better able to form a correct opinion than this *respectable* jury.

Mr. Wilson has also asserted, without any

hesitation, or qualification, that White would now be alive had he not been flogged, and in doing so, I think, he has stepped beyond the bounds that generally restrain prudent and conscientious men and has assumed to himself a knowledge which belongs to Omnipotence alone.

For my own part, I am content to occupy more humble position, and candidly to admit that in a complex science like that of medicine, much must be left to conjecture, as it is quite impossible to define with mathematical precision the predisposing and exciting causes of disease; nor can i reasonably be expected that medical men should do so. All that is required of them in cases like this is, that they should give an opinion to the best of their judgment, founded on their experience in similar cases, and on sound pathology. Acting on these principles I now repeat, that, in my opinion, the exciting cause of the acute disease, which, all the medical witnesses agree, produced White's death, was more likely to have been the considerable atmospheric variation that occurred about the time that he was taken ill than the flogging which he received on the 15th of June, (three weeks before), and from which he is reported by Dr. Warren to have perfectly recovered.

I am not, however, disposed either to deny, or undervalue the well known law of the animal economy, by which the internal parts sympathize with superficial injuries, but then it must be borne in mind when inflammation of internal parts has been set up in this way it has a peculiar character and keeps pace with the external source of irritation, whereas, in White's case, the supposed source of irritation had ceased to act when he was taken ill. The appearance of the parts when examined after death, was that of a recent acute inflammation, not of three or four weeks, but of a few days duration:—there was effusion of serum into the cavity of the chest, and joining together of the pleura costalis and pleura pulmonalis by soft coagulable lymph—two things rarely, or, I believe, never found when inflammation is excited by sympathetic action.

The only chain of connexion that we have between the punishment and the fatal illness of White, is the evidence of privates Matthewson and Riley, who state that they heard him complain of pain in his chest, but as some of Matthewson's assertions have been positively denied by Dr. Warren, the jury must put their own construction on, the value of the remainder. Riley's evidence is confined to one solitary instance, which occurred the second day after White's admission into the hospital, when he complained of a sense of weight between his shoulders, and a burning pain in his chest; but that complaint of burning pain was never repeated, and we have his confession to Matthewson and others that he was quite well a fortnight after his punishment.

One thing is certain, White was apparently quite well on Saturday, the 4th of July. He assisted in cleaning out the ward, and volunteered to wash out an outbuilding of the hospital on that day, two things indicative neither of acute disease, nor of pulpy disorganization of the muscles of his back, and when told by Dr. Warren that he would be discharged to his duty on the Monday following, he made no remark or complaint.

Now, with the thermometer at 88 deg. which it was on the 4th and 5th of July, even light duty might produce sweating and fatigue, and it is possible when so heated and fatigued, that he may have imprudently exposed himself to a current of air. On Monday, the 6th of July, the thermometer had fallen 20 deg.; a variation considerable in any climate, and rarely witnessed, I imagine, in this country. Diseases of the chest were not uncommon during the months of June and July, and one man, Corporal Barnett, of the 7th Hussars has actually died of inflammation of the lungs, in these very barracks since the investigation commenced.

In the Millbank prison, chest affections have been common, and Dr. Baly, the physician of that establishment, in a note, dated the 31st of July, and addressed to me, states,—"Since the commencement of May there have been nine cases of Pleurisy with copious effusion; two cases of Pleurisy with slight effusion; four cases of pneumonia, in two instances combined with Pleurisy, and two cases of acute Bronchitis; making a total of seventeen cases of severe inflammatory disease of the lungs and pleura. I may remark that none of the men affected with these inflammatory affections of the chest, had been subjected to corporal punishment, and that, with regard to the probable origin of their illnesses I have been able to come to no other conclusion than that they were caused by casual chills, which the men were predisposed to suffer from, in consequence of the extraordinary heat of the weather having produced a relaxed and perspiring state of the skin. You are at liberty to make any use you may think proper of the information contained in this note."

I am glad to avail myself of Dr. Baly's kind permission, as it will show you and the jury that complaints similar to those of which White died were prevalent, and convince you that other medical gentlemen, besides those connected with the army and this case, entertain the opinion that they may be produced by atmospheric changes acting on a relaxed and moist skin.

In conclusion I beg to observe that I am not here as an advocate for corporal punishment; for of all the duties that medical men of the army have to perform, its superintendence is one of the most painful. But in justice to the military officers I must add that whenever I have deemed it proper to arrest the punishment for medical reasons and to recommend the man to be taken down my suggestion has been received with apparent satisfaction and acted on instantly.

JOHN HALL.

THE INQUEST AT HOUNSLOW.

(Letter from Colonel Whyte.)

(To the Editor of the *Morning Chronicle.*)

Sir,—I have hitherto abstained from all defence of my conduct with reference to the late court-martial and inquest on Private Frederic White of the 7th Hussars, trusting that when the mass of false reports and distorted facts has been cleared away by time and inquiry, the good sense and feeling of the public could not fail to do me justice, but deliberate false statements made by a recognised authority, such as are presented by Mr. Wakley's address to his jury, cannot be slurred over with out personal denial. I pass over the question as to whether flogging was the cause of the man's death. I leave that to be treated by surgeons in general and the *Medical Times* (Vide *Medical Times* of Saturday, August 1) I pass over the question as to whether it was fitting and decent that Mr. Wakley, utterly throwing aside the opinions of the other uninterested medical men, should recommend the jury to abide by the single opinion of Mr. Erasmus Wilson. I pass over whether it was right that even after Mr. Erasmus Wilson's discovery, the body should be re-interred without at least giving the other medical gentlemen an opportunity of seeing whether it really was a fact that such a change was there or not; and lastly, whether the most general mode of obtaining correct evidence on any point is to question and admit the evidence of the criminals themselves, as was done throughout, in the vast mass of irrelevant matter brought before the inquest. On all these points I say nothing, but leave them to the world and the medical profession to deal with, and pass at once to the broad statement made by Mr. Wakley, in his address to the jury, that in this case *there had been a deliberate attempt to hold back that investigation due to the law, to the regiment, and to society.* We will now see how far this statement is justified. On the morning of the 11th of July, it was reported to me by Surgeon Warren that private White was in a state of danger, from an acute attack of inflammation, that the progress of the disease was rapid, and he feared it might terminate fatally. I immediately desired Dr. Warren to report the facts to Sir James Macgregor, the head of the medical board, and on this report Dr. Hall was sent down. The man died that night. A post mortem examination was then made on the 14th, of which the following is a copy.—[This document has already appeared in our columns.] —On the receipt of this I forwarded it direct to the adjutant general. The ordinary course in the service is to bury men the second day after death, whereas this man died on a Saturday and the application was made on the Monday to bury him. On the *Wednesday* following, or almost five days after his decease (and that in the hottest weather ever experienced in this country), the arrangement for his burial was made, as is usual in the service, by his troop, and an attempt is made to fasten a charge of misrepresentation and concealment on the authorities, because the troop sergeant who bore the application (utterly ignorant of the case), in answer to a question of what the man died, says, "Of his liver;" although in his ignorance he appears to have been as near the mark as Mr. Wilson, in the opinion of other medical men. Still, to prevent any misconception arising from this statement, as I found there were various reports afloat, I sent to Dr. Trimmer a copy of the medical certificate on the post-mortem examination the following morning. It was during the period between the Saturday of his decease and the Wednesday of his burial that the speculation of public curiosity was attracted—not from any suspicions (as the coroner states) in the *regiment* as to the cause of the man's death nor from any suppressed publication of the medical misrepresentations, for which I can scarcely be supposed answerable, as there were no circumstances regarding this man's death that could embarrass a commanding officer. It is quite clear that there could be no necessity for concealing it on the part of the "*people* in the barracks," and it is equally clear that the mystery which the coroner alleges to have hung round the report of this man's death when mentioned at the registrar's office, and to the clergyman, was a mystery that could be traced no further than themselves, and solely of their own creation. Nor am I aware that the inquest has elicited any facts, with the exception of Mr. Wilson's discovery, that the public might not have been in possession of had they applied to the proper source. From the time of the *post mortem* examination, I further beg to say that I placed no bar to the free communication between the soldiers and civilians. The usual ingress and egress to the barracks went on between both parties, which would scarcely have been the case had I been anxious to suppress information. Before the inquest sat I desired Captain Thurley, the senior officer of my regiment, to wait on Mr. Wakley, and give him every information in his power; which was done. And further, I wrote at the same time to Mr. Wakley myself, to the effect that my most anxious wish was to afford the public, the coroner, and the jury, every aid in my power to assist their investigation—stated, although not summoned, I should be there in readiness, and anxious to answer any question that any member of the jury might wish to put, and requested him to read my letter to the court. It however suited his purposes better to put it in his pocket, and not name it until the end of the examination of the second week, when he made casual mention of it. Mr. Wakley appears to think that I ought to have reported and made statements on the circumstances of the man's death, directly to himself and other civil authorities, and by no means seems to divine that my duty, as a soldier, was simply to give a full statement to superior military authorities, and having done so, to act afterwards solely on their orders. Be that as it may, I trust that I have made clear to the public that there was no attempt at concealment on my part or that of the regiment; and, therefore, that his statement on the opening of his address to the jury was utterly unfounded, and calculated to bias most unnecessarily the minds of the jury and the public at large.—Your most obedient, J. WHYTE Lieut. Col. 7th Hussars.—Hounslow Barracks, August 5, 1846.

FROM THE WEEKLY CHRONICLE, EDITED BY MR. WARD, M. P., SHEFFEILD.

Mr. Wakley was elected Coroner on the

strength of two principles—politics applied to procure the appointment to judicial office, and the opinion that a medical man was most fitted to administer the functions of the office: Mr. Wakley has effectually demonstrated the fallacy of the latter proposition, and he has supplied another reason why political feeling should never be suffered to warp the judgment in the choice of an administrator of law.

We do not say this from any jealousy or ill-feeling to the Medical Profession, for it is a noble one—full of many amiable, and learned, and benevolent men, amongst whom we have known, from time to time, one or two, who, to medical knowledge, superadded a legal intellect eminently fitting them for the office, which they could not, and would not but have adorned. Such men, however, could hardly win the attention of a County Constituency, or think of seeking it, except under very unusual circumstances, and we are not called on either to discuss the rule that the office is a legal one, or the exception that to be a medical man is not, in itself, a disqualification; since it is enough, for our present circumscribed purpose, that Mr. Wakley illustrates the rule, in his own person constituting no exception, and that his illustration is sufficiently striking to settle the question of Medical Coronerships for a century to come.

Very advantageously indeed, for himself and the public, might Mr. Wakley exchange a little of his intolerable amount of self-appreciation for a corresponding extent of legal appreciation of the principles of that law it is his luck, or his misfortune, to administer. But as the Court of Queen's Bench has vainly endeavoured to indoctrinate him with a little knowledge of the matter, we shall not attempt the hopeless task for ourselves. But less noise and more decorum,—a sustained gravity fitted to the sadness of the occasion, where the tendency seems to be to relieve deep tragedy by broad farce,—a rigid rejection of self in the constant contemplation of the business, instead of the Royal Victoria pause, which "waits for the applause,"—an inflexible impartiality in the manner, as well as in the matter, in place of the eternal hunting up, and laying out for, popularity, the case, the case and not the Demagogue—surely these things are within Mr. Wakley's reach; and if they are not they ought to be.

Mr. Wakley can go through a case with a dash like the little pony at Astley's through his papered hoop;—he can dodge it, also, as the Clown in the circle dodges the whip: the Inquest on poor Clara Webster is an instance of his first style; the Hounslow Flogging, of his last. We felt sure, from the first, that the melancholy affair would furnish him with the opportunity of keeping himself before the public, *via* the *Times*, for a month; and at the termination what does he? complains of the irrelevant matter introduced, the irrelevancy being all his own!

For intricacy and confusion we pit his examinations against those of Dogberry: "Masters, it is thought that it will go to be proved,"—"Stand aside you, now,"—and "'Fore god, both in a tale!" are nothing to it. We dare say it is all very clever, and that Mr. Wakley has some circumlocutory notion of circumventing somebody by it; but the manner passes all legal comprehension.

Sometimes the proceedings are relieved and the interest revived by the discovery of a mare's nest on the part of the Coroner, as when he fancied, or pretended to fancy, upon some verbal jumble of a witness, that one of the farriers had flogged without orders, and was therefore obnoxious to a charge of manslaughter—a blunder which, if not a mere clap-trap, seems to argue in favour of a military coroner for that special occasion: then ever and anon, Mr. Wakley bursts forth with a letter which he has received, which either ends in smoke, or lets out the interesting fact that he has been pursuing the inquiry out of court. Suddenly, in illustration of one benefit inherent it would seem, to the system of medical coroners, as carried out by Mr. Wakley, a difference of opinion arises between Mr. Wakley and a medical witness upon a question of physiology, pathology, or the like, and next to a religious difference, there is nothing like a scientific one for virulence of feeling. In the present case, a sort of sauce *piquante* is poured over the dish *a l'ordinaire* by the witness complaining of being excluded from the *post mortem* examination, to which the judicial intellect of the Coroner teaches him to reply by the question "What right had you to be there more than any body else?" and by charging the witness with "irregularity" in conducting the previous examination! And lastly, when the whole proceedings become most earnest and grave, a funny question or remark from Mr. Wakley set the whole room in a roar.

It is not wonderful that, with such an example before them, the Jury should forget themselves and indulge in partisan exclamations; and it is not to be expected that the judicious think should attach much weight to the result of an inquiry so directed.

SURGEONS AT INQUESTS.

(To the Editor of the Medical Times.)

SIR,—Allow me to call your attention to the extraordinary inquest lately held at Hounslow which is of importance to every person throughout the country.

By the reports in the papers we find that the medical evidence is directly contradictory, so that one party or the other must have sworn falsely upon the affair.

It requires no extraordinary acumen to see that the coroner endeavoured to make a case of the whole affair—to manufacture something unpalatable to the public—and, knowing that nothing could be done without medical testimony he contrived to procure that also.

He announced that a great man was coming from town. Expectation was excited.

Parturiunt montes nascitur ridiculus mus.'

Talent is invoked, and down comes Wilson. I we look to Wakley's inquests, we always find the modest Erasmus puffed most painfully, which has led many to enquire, is there no compact between them—is there no collusion between the puffer and the puffee?

Erasmus comes and examines the body: others are excluded, except those whom the coroner thinks he can readily overawe by the mighty testimony of the huge Erasmus.

The body is putrid, Wilson finds the cause of death quite apart from the flogging, which much perplexes him. Nothing undaunted, however, this brave man, before the whole country dares to convert putrefaction into a disease, and we find him swearing that the putrid muscle is affected with pulpy softening.

The other medical men whose evidence redounds much to their credit, disclaim "this never a fore-heard-of disease," and swear that it is to be attributed to putrefaction. Erasmus, therefore, stands publicly forwards as either having made a new discovery, or having forsworn himself for a party purpose. Let him now clear his character, or bear the opprobrium.

The fact of a coroner acting in collusion with a surgeon, whom he is endeavouring to puff is extremely important. It involves a very serious principle, for it is very apparent that Wakley and his man Friday can injure any man's character, and rack any man's peace of mind, as the result of their mere whim, or more settled malignity.

Against such collusion, sir, I emphatically protest, and call upon the authorities either to appoint a coroner incapable of influencing his surgeon, or to provide for the summoning of gentlemen who are independent of the will or the whims of Wakley.

I am, Sir,
Your obedient servant,
"A CONSTANT READER."

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF SURGEONS. The following Members of the College having undergone the necessary examinations on the 4th and 6th instant, were admitted by the council on the 12th instant to the Fellowship; viz. Messrs. William Reader Cass, Leeds.—Richard Hunt, Canterbury. Edward Barnfield Gardner, Stroudwater. Joseph Hutchinson, Chatham Hill, Manchester. John Barrett, Orange Grove, Bath. Edmund Boutt, Bath. James Hunter Junr. Milner Sq. Islington, and Edward Newton, Howland street, Fitzroy square.

MEDICAL LEGISLATION.—Mr. Wakley and Mr. Warburton have introduced into the House of Commons a measure copying the registration clauses of Sir James Graham's bill. It has had two readings, but it is expected to proceed no further, from, among other reasons, the late period of the season in which it is introduced. No portion of Sir James Graham's measure received coarser "vituperation" from the Radical Coroner than the registration clauses; and the feeling is universal, if indifferent to this new piece of trickery and distrust of its author.

OBITUARY.—On the 9th instant, at Bath, aged 68, William Rizdon Kebby, Esq., 35 years surgeon in the Ordnance Medical Department.

DEATH OF DR. BOSTOCK.—We regret to record the death of this eminent physician and natural philosopher, who died in Upper Bedford Street on Thursday, the 6th instant. He was a native of Liverpool, and a pupil of Drs. Black, Priestly, and Monro. We shall next week furnish our readers with a memoir.

ILLEGAL PRACTICE OF MEDICINE.—The Faculty of Paris appears to have taken more to heart than heretofore the question of the illegal practice of medicine in France. Since M. Raspail's condemnation, a certain M. R—s, a graduate of Giessen, who was practising under the cover of his purchased degree, has been condemned to a fine of 200 francs. These fines may appear of no importance, and, in fact, to be a sort of evasion of the laws; they are, in reality, a pro forma punishment; but a repetition of the offence is visited with imprisonment. It is fair and just that the interests of public health should be cared for and protected—it is just that the very existence of men who have laboured hard for the acquirement of their profession should be under the shelter of the law and that M.Ds. by purchase be not allowed to endanger by their ignorance the lives of confiding patients. At the same time that we fully assent to the justice of the punishment inflicted upon Raspail, we cannot but deplore that so great a mind should have been found compelled by want to descend to the tricks of charlatanism.

MORTALITY TABLE.

For the week ending Saturday, August 8, 1846.

Causes of Death.	Total.	Average of	years.
ALL CAUSES	1135	898	968
SPECIFIED CAUSES .	1130	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases ..	345	201	188
SPORADIC DISEASES—			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat.........	142	99	
Diseases of the Brain, Spinal Marrow, Nerves and Senses	157	155	157
Diseases of the Lungs, and of the other Organs of Respiration	215	227	294
Diseases of the Heart & Blood-vessels..............	31	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	125	87	72
Diseases of the Kidneys, &c. ..	10	6	7
Childbirth, Diseases of the Uterus, &c.	11	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	12	6	
Diseases of the Skin, Cellular Tissue, &c................	3	1	2
Old Age....................	47	52	67
Violence, Privation, Cold and Intemperance...............	32	26	26

No. 360. SUMMARY. Aug. 22.

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.



[From our own Correspondent.]

ACADEMY OF SCIENCES.

Meeting of August 10. M. MATHIEU in the Chair.

TREATMENT OF ANEURISM BY GALVANISM.

In a former number we recorded one case of cure of aneurism of the temporal artery, by M. Petrequin. That gentleman now presents to the Institute a case of popliteal aneurism equal in size to a hen's egg. The cure was complete in ten or twelve days. The rest of the meeting was consecrated to subjects foreign to medical science.

ACADEMY OF MEDICINE.

Meeting of August 12, 1846; M. ROCHE in the Chair.

A letter was read from Dr. Junod, recommending the use of his metallic exhausters in the first stage of typhoid fever. This method, according to its promoter, Dr. Junod, would combine the advantages of preventing local congestion, and of relieving many of the symptoms without acting directly upon the inflamed intestine, and without causing debility from loss of blood.

Another letter was read from Dr. Aubert Roche, requesting permission to communicate to the meeting some facts connected with the incubation of the plague. Permission was granted.

THE EPIDEMICS.

M. Dubois (of Amiens) read an official report on a paper, by M. Castonnet, entitled "An easy Method of Preparing a general Topography of the departments of France." In this paper the author reproaches the society with negligence in reporting on papers relative to epidemics. M. Dubois proved that M. Castonnet was in complete ignorance of the habits of the Academy, and that all the useful documents were employed. The report was adopted.

A VACANT SEAT IN THE ACADEMY.

After a short debate the Academy decided that the next nomination should take place in the section of Materia Medica.

THE PLAGUE.

M. Aubert Roche observed that the twenty-ninth conclusion of the report clearly implied that the incubation of the plague never exceeded eight days. On a former occasion M. A. Roche had before had an opportunity of defending this opinion before the Academy. Great stress had been laid in the general debate on the analogies between typhus, the plague, and yellow fever. This objection should be met with a very simple answer, *i. e.*, that these maladies differ from each other as much in symptoms and appearance as in their producing cause. The analysis of the cases opposed, since 1841, to the doctrine of the eight days' incubation, demonstrates that errors have always been committed in favour of the contagionists, who believe in a protracted incubation. M. A. Roche concluded that on this period of eight days' incubation might be based all the new reforms introduced in the quarantine system.

M. Hamont was of opinion that it was perfectly proved that the production of the plague constantly depended upon local causes of insalubrity. He did not believe in the pestilential constitutions, admitted by the commission; and thought that the Academy should add to the first conclusion of the report the statement that the plague yielded to sanatory improvements, and especially to lazarettos. Meeting adjourned at a quarter to five.

HOTEL DIEU.

CLINICAL LECTURE ON INTERMITTENT FEVER, BY PROFESSOR CHOMEL.

Essential intermittent fevers are exclusively observed in predetermined circumstances. They are always produced by special agency, such as the accumulation of stagnant waters either on the surface or beneath the level of the soil. These fevers strike on entire populations, reappearing every year at the same period when the earth is damp. Epidemic intermittents thus developed cease to exist when the ground becomes dry. This theory of the production of these diseases is now a fact admitted on all hands. When not occasioned by these atmospheric conditions the ague shows itself only seldom. Thus in Paris, where the disease is not common, it was frequently observed in the neighbourhood of the little river Bièvre, before that stream was excavated and walled in. The direction of the winds must also be taken into consideration in the history of the causes of ague. In this country the westerly winds are chiefly observed to blow when intermittent fever becomes epidemic.

It is not during the coldest weather that the ague makes its appearance, nor is it during the excessively hot days of summer, but when, in consequence of the intense heat, a portion of the liquid elements of marshes is absorbed, leaving a muddy deposit on the fenny surfaces. In very cold climates, and also in very hot climates, intermittent fevers are not common. Particular individual circumstances also exist, rendering the human subject more apt to receive the infection. Thus, during the night, miasmatic principles are more easily absorbed, probably on account of the condition of the frame during sleep. Weak persons, and those whose blood is impoverished by repeated venesection, are much more exposed than strong, robust individuals. We have said that in Paris intermittent fever is rather uncommon, and yet it is impossible to visit any hospital without meeting with some cases; thus we have at present in the wards a patient labouring under the ague. the disease was not caught in Paris, but in Africa. This you will observe in most of the Parisian patients affected with fever. They have brought it from another part of the country. Some years since we attended a lady recently returned from Poland, whence she had brought the infection. Most of the country places in the neighbourhood of Paris are tolerably healthy; yet the late construction of railways and of the fortifications have occasioned many cases of intermittent fever. In many subjects, however, it is extremely difficult to detect the determining cause of the malady they are affected with, but, even in doubtful cases, marshy miasmata must undoubtedly be considered the cause of the symptoms. The period which elapses between the action of the causes and the outbreak of the first paroxysm varies considerably, and cannot even be determined by approximation. The febrile attacks, isolately considered, present two distinct forms, designated by the words—normal and abnormal paroxysms. The former are constituted by three distinct periods, called rigor, calor, and sudor. This is fortunately the most common form. The duration of each stage is generally one hour or half an hour, and the calor and sudor generally last longer than the period of cold. Together with these modifications in the temperature of the body, are observed many functional disorders, such as sickness, headache, lassitude of the limbs, and in almost all notable changes in the composition of the urine. These phenomena are sufficiently well known to permit us to dispense with a lengthened description. The paroxysms never last beyond twenty or twenty-four hours; when they have passed twelve hours they may already be considered as unusually long. The first attack is followed by the period of intermitting, during which the patient thinks himself perfectly cured; but a second paroxysm soon occurs, the ague consisting only in a succession of alternatives of illness and apparent health. Secondary symptoms soon are produced by the repetition of the paroxysms. These secondary phenomena consist in the change of the complexion, and in the more or less considerable increase in size of the spleen. The liver is sometimes also hypertrophied, and œdema shows itself in the extremities, produced by compression of the abdominal veins by the large viscera, or by the impoverishment of the blood. The intervals between the attacks constitute the differences of type. Thus the fever may be quotidian; it is tertiary when it reappears every second day; quartan when forty-eight hours separate the attacks. Double tertiary is that fever which occurs every day, but with a degree of intensity which is the same only every second day. Other fevers have been also admitted—double quotidian, double tertiary, double quartan These fevers seldom can be referred to essential ague. they belong more properly to symptomatic febrile excitement. Quintan fever, in which the paroxysms only occur every fifth day, has also been admitted, although it is observed in Europe only by exception.

HOSPITAL BEAUJON.

M. Robert.

Retention of Urine—Puncture of the Bladder.

J. K., aged sixty-nine, of a good constitution, was admitted into the hospital on the 1st of May. He denies having ever had any venereal disease, and says he always enjoyed a good health up to the spring of 1844, when he was attacked with cerebral congestion and temporary paralysis of the right side of the body. The excretion of urine is slow. On the 29th of April, 1846, after a repast, during which he did not commit any excess, he found it impossible to evacuate urine. During the ensuing night the bladder remained distended. On the next morning a catheter was introduced, and the operation was repeated in the evening with a tolerable degree of facility. On his admission into the hospital, the abdomen was considerably distended, and the hypogastric region quite dull on percussion. Pressure of the abdomen permitted the distended bladder to be detected. Examination of the perineum showed the presence of considerable swelling in the prostate gland. Vain attempts were made to introduce metallic catheters, or even gum bougies of the smallest diameter. After each attempt a small quantity of blood oozed from the urethra. Pulse was 90; the skin was cool, and the tongue moist. Fifteen leeches were applied to the perineum; the patient was placed in a bath, and poultices applied to the stomach. In the evening fresh and vain attempts were made to introduce a catheter. On May the 2nd the face was red, tongue dry, pulse at 110; a few drops of urine had been passed. The catheter being again vainly employed, venesection ad ℥ xvj was performed, and the patient was placed in a bath. On May the 3d the urine had not yet been evacuated, the bowels were confined, the tongue dry, and the pulse 120. Finding the introduction of the catheter impossible, Dr. R. resolved upon performing puncture of the bladder, and the operation was at once instituted. A curved trocar being passed into the bladder immediately above the symphysis, two quarts and a half of brownish and fetid urine were extracted, and the canula of the trocar was maintained in its place with an appropriate bandage. In the evening the pulse fell to 110, the tongue was dry, the bowels confined, and during the night agitation and subdelirium were observed. During the following days the condition of the patient gradually improved, the scrotum became, however, slightly œdematous from its contact with urine. The canula, having been accidentally removed on the 12th, was replaced by a fine bougie, which served as conductor to replace the tube. On May the 17th, the patient was again seized with unpleasant symptoms, which were removed by the exhibition of saline purgatives. On the 5th of June the patient left the hospital, the abdominal wound being perfectly healed.

The Spas of the Rhine, by Professor Trousseau and Dr. Lasègue.—(Section 5 continued.)

During the second stage of hypochondriasis the patient for the first time, besides dyspeptic accidents, experiences erratic spasms, which would escape his notice if he was not interrogated on the subject. Thus he complains of cramps in the lower extremities, involuntary trembling of the hands, tremulous movements of the eyelids. The internal muscles are occasionally the seat of spasms, deglutition becomes difficult, palpitations of the heart are observed, and the bladder contracts involuntarily. This character distinctly points to what is generally called nervous complaints. But it is important to remark that the symptoms occupy the nervous system only in a secondary manner: they were abdominal, and now become general; their seat, *not their nature*, is modified. It is on the progress of the symptoms that chiefly rests the success of treatment. At this period, when the malady has not yet fixed upon any special organ, it is still easily cured. Hitherto the patient had only resorted to the resources of nature; he now seeks more efficient assistance. The curative indications are not here the rigorous consequences of the facts. No critical phenomena to be encouraged by the physicia[ns] have yet appeared. Later, piles, intermitten[t] diarrhœa, congestion, and nervous manifestation[s] show to what natural derivation the patie[nt] is predisposed. It is in the stimulation [of] the secretion the most favourable results ar[e] to be found; but, as observation teaches us [that] nature proceeds in the most fortunate cases, it als[o] informs us the temporary amelioration [is] not to [be] trusted. To be really efficient, inte[rn]al super secretion must be prolonged, and introduce into th[e] system a new habit. Fr. Hoffmann, who fir[st] established the reputation of acidulated and salin[e] spas, was in the habit of prescribing in cases [of] hypochondriasis the water of Eger-Toplitz, [or] even Selters. The experience of modern times ha[s] not contradicted the opinions of Hoffmann. Col[d] spas are generally preferable. The water may be mixed with milk; baths and enemata should als[o] be recommended. The great advantage of th[e] waters containing chlorate of sodium, Hombourg, Kissengen, and Manheim, is the slow modificatio[n] which they produce in the general health. In thi[s] respect they are far better than alcaline spas, th[e] energy and activity of which may be productive o[f] inconvenience. Many physicians think the patient[s] should be prepared by an appropriate method [;] others neglect this precaution; and in the hypothesi[s] of the German school phlebotomy and local ab[s]traction of blood are particularly beneficial. Bu[t] repeated abdominal evacuations lead by anothe[r] road to the same result: abdominal plethora vanishes, and the equilibrium is re-established. Add to the precious resources of mineral spas, th[e] horse and coach exercise, amusement, company, [a]nd the example of other patients, and you hav[e] obtained the most excellent of all medications. A[t] first the diagnosis of hypochondriasis is attended with no sort of difficulty; but in proportion as the disorder advances, extends its branches in all directions, and loses the precision of its contour, the diagnosis becomes attended with much greater difficulty. The first termination of hypochondriasis resides in hemorrhoids. In this crisis the prodromic signs of the molunen hemorrhagicum are distinctly observed: spasms become limited, and the pain localized. We are far from believing that all cases of hypochondriasis terminated in piles; but we are satisfied that the hemorrhoidal discharge is a frequent consequence of the disease. When the piles have appeared in consequence of other complaints they should not be suddenly suppressed; their suppression, notwithstanding modern theories, will be the cause of most variable disorders. In such cases mineral waters, containing salt and carbonic acid, are productive of the most satisfactory results. The weakest of the waters should be used in plethoric cases, such as spas of Soden and Hombourg, Wiesbaden, Kreutzenach, and Kissingen. To Manheim, on the contrary, should be sent the individuals who are not threatened with internal congestion or excessive depletions. Should the piles increase in intensity, so as to constitute a complication of too great severity, the spas of the Rhine should not by any means be recommended; they might cause increased suffering. Some physicians, considering that the natural production of hemorrhoids proves advantageous in hypochondriasis, have proposed artificially to produce hemorrhoids by the use of stimulating applications, aloes, &c. Let us say at once that this method has never been successful. It is no more in our power to create hemorrhoidal congestion without the hemorrhagic molunen, than it is to recal the menses if the movement of the blood does not direct it towards the uterus.

Hypochondriasis is frequently terminated by nervous accidents. Every one has observed the melancholy and the sort of insanity to which the hypochondriac patient has given its name.

Hysteria was long considered to be a form of hypochondriasis, and this confusion was sanctioned by the authority of Sydenham and the writings of R. Whitt. Here again particular symptoms point beforehand to the direction the disease will ultimately follow. Paroxysms of essential asthma or neuralgia, alternating with functional disorder, will enlighten the prognosis; to these cases the saline mineral waters are quite applicable, and should be employed at an early period; but minute examination is necessary, as those waters will serve only to increase essential neuralgia or even symptomatic forms of nervous suffering. Thus asthma is improved at Hombourg, Kissingen, and Weisbaden; but all asthmatic patients should not indiscriminately be sent to the duchies of Nassau or Baden. This would be the place to study the cerebral consequences of hypochondriasis. The timid insanity is the most common; some fear their friends, others their enemies, others their disease. The consumptive patient knows of his fatal complaint only the pain and oppression; the hypochondriac, on the contrary, undergoes a malady none of the symptoms of which escape him. When the patient is in the incipient stage of insanity, cure the hypochondriasis and you will at the same time cure the delirium; when matters are more advanced, should even the original complaint disappear, madness shall remain; it is become habit, necessity; we can no more say of it, "*sublatâ causâ tollitur effectus.*" Gouty affections sometimes terminate in hypochondriasis. We shall leave the study of gout for a special chapter.

The fourth and last form consists of exaggerated or diminished secretions. Constipation usually attends this disease, and at irregular intervals, it is replaced by a frequent though not abundant diarrhœa. These accidents are extremely rebellious when they occupy the urinary organs; gravel is their inevitable consequence. Finally, hypochondriasis is, in our opinion, a real malady—*the pathological unity of which is demonstrated by the unity of the treatment to be employed.*

Gout—(Section 6).

Sydenham, when affected with the gout, comforted himself with the reflection that it is a disease special to men of art and to great people. It does not appear, however, that this compensation is sufficient to all gouty subjects, or that it ever makes them forget their sufferings. Rich, for the most part, they shrink from no sacrifice, and submit cheerfully to the roughest treatment, when it holds out a hope of cure; but the specific, that *rara avis in terris*, which would be productive of a fortune to its discoverer, is still to be found. Specific medicines are the gift of chance, and experience regulates their use. It is not the most learned who make the discovery, and, consequently, it is not necessary to be learned to make it. With these unfelicitous hopes have mineral waters been often applied to the treatment of gout. The rapid perturbation or the slow revolutions which they bring on in the constitution have been enthusiastically cried up as infallible; but the progress of the cases now shows the fallacy of those promises, and, disappointed in their hopes, the patients obstinately revile those spas to which they came confident of a complete cure, and where they might have obtained partial relief. The consequence is that in this matter absolute opinions have carried the day, although truth is certainly on the side of less exclusive doctrines.

Let us begin by stating that, in our opinion, no single mineral water enjoys specific properties against gout: many are useful, many injurious; none answers in all cases, or deserves the title of specific. This conviction will readily account for our mode of appreciating the virtues of mineral waters. We shall endeavour to detect in gout what is not itself to distinguish its complications. The successive elimination of symptoms belonging to the main complaint is one of the most delicate applications of therapeutics.

Gouty subjects have long since been divided into two great classes: cases of atonic gout, and cases of acute or tonic gout.

Tonic gout is that which is most generally described. It is easily observed: its progress is regular, its paroxysms are short, very painful, but they are separated by intervals of complete calm, and reappear only at distant intervals; often the articulation of the big toe is the only one affected. Paroxysms are chiefly observed at night, they diminish and cease even in the morning, and return the following night with equal violence: fever is often present, and always redness and œdema of the affected part. It is readily conceivable that this form should have been confounded with arthritis,

and that pathologists should have hesitated to grant to it more general influence than to any other articular lesion. But the mistakes in therapeutics soon pointed out the pathological errors. Medications, instituted without discrimination and carried on without precaution, proved that this was not a simple local alteration in which the organic functions remained unconcerned. In tonic gout the characters of the atonic form are met with diminished in importance: it is a difference in degree, not in nature. The premonitory symptoms are general, and do not point to the exact delimitation of future symptoms; although the articular inflammation becomes regularly localized, still it can always change its seat and recover its natural mobility.

It is a fact of undoubted experience that the danger of gout is always proportionate to its tendency to displacement. Preoccupied with the pain, the patients are not of that opinion: they measure the importance of their case to the intensity of their sufferings. The physician employs another measure, and knows when it is necessary that he should prescribe a violent pain in order to remedy a fatal condition of the system. In cases of tonic gout, patients solicit entire, even immediate, relief; they do not believe in its dangers, and the prudence of their physician is called incapacity. We cannot, therefore, determine with too much circumspection the circumstances in which we may accede to their wishes, and those, on the contrary, in which we must refrain.

In tonic gout patients are generally plethoric; a luxurious mode of life, sedentary habits succeeding to active occupation, too great indulgence in the pleasures of the table, have been considered by all pathologists as the chief producing causes of the disease. On these etiological data have been founded the therapeutical indications. Thus, when the attacks become intolerable, plethora is first to be destroyed; active exercise, severe regime, and fatigue, even succeed in diminishing the intensity of the crisis, and ensure long intervals of repose. The debilitating waters of Ems would in such cases, therefore, be useful; it is not the gout which is improved, but the gouty diathesis—a distinction which will appear subtle, but which is not without importance. The patient is charmed with the relief he has obtained, he continues with perseverance the use of the waters, paroxysms do not return, the plethoric state has ceased; the patient, in a word, seems cured. But the physician must not permit himself to be led astray by these fallacious hopes—the disease has only changed its nature; it was local, it is now diffused: a tonic gout has been produced, less severe in appearance, more dangerous in reality, because it has less tendency to become localized. Everything here depends upon the measure of the treatment: the pains should be diminished, but on no account entirely removed. Unfortunately we have on this point no precise rules for our guidance; tonic medicines soon give rise to characteristic appearances. Not so with debilitating drugs. Under these circumstances excessive reserve is only a fair degree of prudence. But we have other documents which permit us more easily to foresee the facts and to observe them. The accessory symptoms of tonic gout have not the same uniformity as its essential characters. Thus age is a consideration of some importance. Tonic gout occurs frequently in young, plethoric subjects. The privation of movement is insupportable to them, feverishness is frequent, and preliminary congestion generally violent. Is there, in appearance, a more favourable condition for the exhibition of the alcaline mineral waters? And yet in no circumstance is caution more necessary.

All physicians know that subjects affected during youth with gout die young. They seldom resist an affection which older subjects bear without much danger. Local gout does not kill: it never endangers life so long as it returns to the joints. Therefore the prognosis must be more severe in young men, because the disease has a tendency to displacement—a fact proved by daily observation. Constitutional plethora is an attribute of mature years; in youth plethoric congestion is incomplete and transitory.

If mineral waters really cured the gout and destroyed the diathesis, perseverance in the treatment would give many chances of success. But we can advise the spas of Ems and Vichy only on the condition that their exhibition be limited by the strict rules of prudence. It should be better to abandon this treatment when it is impossible to direct it oneself than to risk the substitution of atonic for tonic gout.

DAN. M'CARTHY, D.M.P.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON PRACTICAL MIDWIFERY.

By EDWARD RIGBY, M.D.

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Delivered last session at St. Bartholomew's Hospital, and revised by the Professor for the "Medical Times."

At the close of my last lecture, gentlemen, I was engaged in explaining to you the importance of ascertaining that the uterus has contracted firmly after labour. I told you that this was a duty never to be neglected, and I explained to you that your patient could never be considered safe from hemorrhage until the womb was firmly contracted. I told you also that there was no necessity for the escape of blood externally, in order to place your patient in a most hazardous condition, but that internal bleeding might be going on insidiously, and I endeavoured to impress on you the state of the uterus felt through the abdominal walls by which this condition might be known. I will briefly recapitulate the leading points, bearing on this subject. If after the birth of the child, and before the expulsion of the placenta, the uterus feels large and flaccid, you may be sure some mischief is going on; if on the contrary you feel the organ hard, firm, and about the size of a fœtal head behind the pubes there is no chance of hemorrhage being actually present. Still however the organ may become relaxed and bleeding may come on insidiously, so that it behoves you to watch your patient with the greatest care, and frequently to examine whether the uterus continue contracted. After the expulsion of the placenta, if the uterus be firmly contracted it will be felt behind the pubes about the size of a cricket ball, and quite hard, and as long as it continues in that state, no hemorrhage can take place.

After the birth of the child, the placenta sometimes follows immediately, occasionally even it is expelled at the same time with the infant. Generally, however, a few minutes intervene after the severe pain which expelled the child before the uterus again contracts, during which period it seems to be in a state of inaction. You will therefore wait a few minutes, when you will generally find the uterus again begin to contract, and the dull and peculiar pains, which accompany the separation of the placenta begin. These as I have before told you, are called the dolores cruenti. Sometimes they may not begin for some time after the birth of the child, and it appears that the period of their occurrence is much influenced by the rapidity or slowness with which the uterus has been emptied. If then the uterus continue hard and contracted, and there be no hemorrhage, even although the dolores cruenti do not commence for a short time you should wait, and when the pains do come on again, if you run your finger along the cord you will most likely be able to feel its insertion into the placenta. If this be the case you will know that the placenta has been detached, and has partly or wholly passed the os uteri, when it will generally be expelled by the contractions of the vagina.

If, however, hemorrhage take place before the commencement of the dolores cruenti, you must lose no time in waiting, but you must adopt some means by which to make the uterus contract, because you know that to induce firm contraction of the uterus is the only means of ensuring the cessation of the hemorrhage. In such a case as this, of course plugging is out of the question, as sufficient blood may escape into the cavity of the uterus to cause your patient's death: under these circumstances you should give your patient a wine glassful or two of cold water to drink; you should open the doors, and fan her face, or suddenly sprinkle a little cold water in her face. These means will produce a sudden shock, which if the case be a slight one, will generally bring on uterine contraction, when of course the hemorrhage will cease. If your hand be cold you should apply it with the fingers spread out over the abdomen and endeavour to grasp the womb with it. This measure very often succeeds in exciting the uterus to contract when on introducing your finger into the vagina, you find the placenta thrown off.

When in a case either with or without hemorrhage your patient, gentlemen, begins to feel pain, and you, on passing your hand over the abdomen feel the uterus beginning to contract, and feeling hard it will become necessary for you to examine the placenta, and if you can feel, on running your finger up the cord, its attachment to the mass, it will become your duty to assist in its expulsion. In doing this, you must bear in mind the different directions of the axes of the pelvis. Remember that the axis of the vagina and the axis of the os uteri are very different, and that therefore if you make traction on the cord in the axis of the vagina you are, as it were, pulling round a corner; you thus lose a great deal of your extracting force, and run no small risk of tearing off the cord at its insertion; besides which, by pulling the cord against the os uteri instead of directing the placenta through it, you irritate the os uteri very considerably, so as to induce it to contract irregularly, causing what has been called hour glass contraction. I have been called up oftener in consequence of retained placenta from this cause than from any other. When you commence removing the placenta, therefore, you must bear in mind that the axis of the vagina and the axis of the os uteri are nearly at right angles. You must remember the direction the cord takes and having twisted it round your left hand run the fore finger of your right hand along it, and use this finger as a pulley, to change the direction of the extracting force, and thus pull downwards and backwards. You will find, gentlemen, by this means that very little traction will be requisite. The placenta will come through the os uteri without any difficulty, and then of course its expulsion will be quite easy. In many cases you will find that even when the os uteri is contracted round the cord, by steadily keeping up gentle traction for some time the contraction will yield and the placenta will come away gradually. It sometimes happens however when the hemorrhage is severe that more active measures are required, and you will be sometimes called on to introduce your hand into the cavity of the uterus, and detach the placenta. This subject however will come under our consideration hereafter, when speaking of dystocia. When the placenta comes into the vagina you must be in readiness to receive it, and then as it approaches the os externum, twist it round two or three times: by doing this you will twist the membranes into the form of a cord and bring them away entire with the placenta; you will thus avoid tearing the membranes and leaving any shreds adhering to the interior of the uterus, a matter of some importance, as such shreds are apt to cause a good deal of irritation, with putrid discharge and fever. In twin births the placenta will be of course much larger and it is necessary for you to bear this in mind, as in case of hemorrhage the bleeding surface will be much more extensive, and the loss of blood consequently more rapid. In extracting the placenta of twins you should be particularly careful not to use extractive force until they are detached and about to enter the vagina as from no greater size of the contained mass the uterus must necessarily remain larger than after a birth of one child only: the organ will therefore be more liable to inversion from any undue force applied to the funis. Your best plan of proceeding will be to twist the cords together and thus

apply an equal degree of force to each placenta, and as the placentæ come down they should be grasped by the hand and rotated as before mentioned, which will materially assist in detaching the membranes from the uterus should this not be quite completed.

In former times, gentlemen, it was the fashion to bring away the placenta immediately after the birth of the child; I need hardly stay to point out to you the objections to this mode of proceeding.

As soon as the labour is over and the placenta expelled, it will be proper for you to have the wet things removed from under your patient, which will be easily done by the nurse without disturbing her, and a warm napkin applied to the external parts. She should then be allowed to rest for about half an hour, and even to enjoy a little sleep. At the end of this time, during which the nurse should be employed in washing and dressing the child, you will take care that a broad and firm bandage be duly applied and pinned firmly round the abdomen so as to give support to the abdominal organs. This bandage may consist of a jack towel or of a piece of calico, and if the abdomen has been much distended during pregnancy, or if the labour was one of twins and there is any tendency to hemorrhage, two or three folds of a soft napkin should be laid under the bandage in the region of the uterus to increase the support of the part. In many cases of twins it is advisable to apply the bandage immediately after the birth of the first, in order to assist in the expulsion of the second child. As soon as the child has been washed I invariably have it applied to the breast You are aware, gentlemen, of the sympathy existing between the uterus and breast; and you will not therefore be astonished when I tell you that the application of the child to the breast produces permanent contraction of the uterus and consequently does away with all danger of hemorrhage. I have found the application of the child to be the strongest possible stimulus to uterine contraction, and I have never seen a case in which hemorrhage has occurred after its taking the breast fairly for a few minutes. The only case of hemorrhage some little time after labour, which I have had of late in my own practice, was one in which the mother did not intend to suckle her offspring, and consequently the infant could not be applied. The child should be allowed to remain at the breast about five minutes, after which the mother should be encouraged to take three or four hours rest On her waking from her sleep the child may be applied to the breast in the regular way. The mother's breast, gentlemen, is the proper place for the newborn infant, which, according to the investigations of M. Milne Edwards of Paris, possesses much less power of generating animal heat than the adult. Besides this, all young animals naturally seek the warmth of the mother. On the other hand, however, I am far from being an advocate for the child's being constantly permitted to lie by the mother's side; the proximity makes it restless, and induces it to long for the breast at unseasonable hours From the first I think the child should be accustomed to take the breast at certain stated periods; about once every two or three hours perhaps, and the mother should accustom it to an absence of at least four or five hours during the night. You will find attention to this point very important in practice, as by means of it you always obtain four or more hours for your patient during which she can rest undisturbed.

I am happy to say, gentlemen, that the practice of mothers suckling their own offspring has become much more frequent of late years than it was some time since, and I rejoice that the practice continues to increase The celebrated Boer of Vienna, says on this subject, "Every mother who has been strong enough to carry and nourish her child during the nine months of pregnancy, is also strong enough to afford it the breast for some time after birth." Cases however occur in our artificial mode of life in which this is not invariably true. Still however the mother should suckle her own infant in every case in which it is practicable. Dr. Conquest my predecessor in this chair, gentlemen, says in speaking of the necessity of suckling, "A very serious evil arising from a woman neglecting this imperious duty is, the probability of her becoming more frequently pregnant than the constitution of most females can sustain without permanent injury. A woman who suckles her children has generally an interval of a year and a half, or two years between each confinement; but she who without an adequate cause for the omission does not nurse, must expect to bear a child every twelve months, and must reconcile her mind to a shattered constitution and an early old age."

You should never allow anything to be tied tight round the child's body, one reason for this is, that the fœtal circulation is apt to return if there be any obstruction to free respiration; besides this the child will never sleep well, unless its limbs are free. Nurses are constantly in the habit of bandaging the little creatures round quite tightly, and they require to be actively looked after in order to prevent them from indulging their propensity in this way; they generally consider it a great innovation to permit the infant to have the free use of its chest and limbs. Without this however, gentlemen, I need not tell you the child must, apart from more serious evils, become irritable from the discomfort occasioned by restraint, and from want of sleep. In some parts of Germany they mummify the infant completely by bandaging it from head to foot, rolling in its arms and rolling its legs together, so that in fact only the head is left free, and the infant is formed into a solid mass incapable of motion by bandages I will now, as I have nearly finished the subject of actual natural labour, give you a few plain hints respecting your conduct towards your patient, and as Dr. Dewees has given some excellent directions on this head, I shall quote some of them, recommending at the same time his whole chapter on the subject to your attentive perusal Dr. Dewees says, "1st. Let all communications of a delicate nature be conducted by a third person, the nurse, when present should be that person; in her absence any elderly friend."

"2ndly, Endeavour by a well chosen conversation to divert the patient's mind as much as possible from the object of your visit, when your services are not immediately required."

"3rdly, When your presence is not absolutely necessary in the sick room, be as little in it as will be consistent with your duty to your patient; by this you will remove restraint and apparently abridge the period of your watching."

"4thly, Should the situation of the patient in your opinion require to be ascertained let the proposition be made by a third person, as the nurse, and urge in defence of the request, all the circumstances which led you to believe it would be important, as the length of time she had been in labour, the force and frequency of her pains; the evacuation of the waters, if it has taken place, and above all to ascertain the progress of the labour, and whether the presentation be a proper one"

"5thly, If after you have made your examination you should be importuned for your opinion of the nature of the presentation, and the duration of the labour, do not commit yourself by any positive declaration unless you are certain of the first and pretty sure as to the latter."

"6thly, Before you proceed to the examination, let your patient be placed with the most scrupulous regard to delicacy, as the slightest exposure is never necessary."

Early sucking is of the utmost importance on many accounts; and the nurses now a days, at least in London and its neighbourhood, do not so much object to it as they did formerly. I have already given you one reason for the early application of the child to the breast;- viz., the increased safety to the mother which follows it by the firm contraction of the uterus, which it induces Another reason for it arises from the form of the mother's breast. At this period the breast is soft and conical, and the nipple prominent, and the child is easily able to pull it out; whereas if you wait till the breast becomes distended with the milk, the nipple is shortened and the breast hard and flat, so that the infant will not be able to draw out the lactiferous tubes, without biting the nipple, by which means it becomes excoriated. At first the breast is conical, and the nipple easily taken hold of; besides this, if the child be not applied the milk secreted is reabsorbed into the system, and milk fever is set up. This milk fever, gentlemen, has been erroneously supposed to be necessary to the first secretion of milk; it is no such thing, however, for the breast contains milk immediately after the birth of the child. It arises from the absorption of the secretion, and its being thrown back again into the circulation. When the child is applied early to the breast, the mother never suffers from distention or milk abscess; when the child is applied directly, it will take the breast much more readily also, as its instinct is very strong at this period; indeed, it shows this by sucking at anything in its way, even its own finger. Besides this the early milk is thinner than that secreted afterwards, and more fitted for the food of a newly-born infant, and from being of a purgative quality is well suited to purge away the meconium, which the child's bowels contain; and it is, therefore, never necessary to shovel castor oil down its throat for this purpose. Such proceedings as giving the infant sugar and butter, castor oil, &c., cannot too much be condemned; they set up gastric irritation, and in the end produce aphthæ, &c. Generally speaking, the first attentions the infant receives on entering the world, are a series of outrages on its comfort and health. Generally speaking, the first thing the nurse thinks of is to souse some spirit over the unfortunate little thing's head—very pleasant treatment for a creature just come into contact for the first time with the external air, to whose delicate skin the spirit must feel like so much melted lead, and shortly afterwards be followed by a sensation of cold as intense. Then it gets a dose of castor oil; next it is washed; then it is powdered; then it is dressed; and then it gets a large cupful of pap shovelled down its throat, which it must swallow or choke. After this the child becomes flatulent, and then we have dill water, or gin and water administered. What wonder then after this treatment that the infant gets thrush?

Whether there be milk or not the child should be put to the breast immediately. As regards the smegma with which the newly-born infant is covered, it is secreted for the protection of the skin; and as it is secreted by the sebaceous glands, it cannot be removed by soap and water. The best plan of removing this secretion is, by beating up a little butter without salt into a liniment, with a little white wine. This may be smeared over the parts, and when the child is afterwards placed in warm water, the smegma comes off easily.

At our next meeting, gentlemen, we shall commence the subject of the mechanism of parturition.

The Nature, Causes, and Treatment of Mental Diseases.

By M. PINEL, M D., Member of the Academy of Medicine, formerly Physician to the Bicêtre and Salpêtrière Asylums, Author of the "Traité Medico-Philosophique sur l'Aliénation Mentale," "Medicine Clinique," "Nosographie Philosophique," &c &c. Translated, with Notes, illustrative of some important Doctrines in Physiology, Phrenology, and Moral Education,

BY DR. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

V. SEROUS CONGESTIONS OF THE BRAIN.

Hydrocephalic Œdema.

After sanguineous congestions, the most frequent affections of the brain are lesions of secretion.

In the acute stupor of the insane we have seen the effects produced by an excessive accumulation of fluid around the encephalic mass on its functions; suspension of the intellectual faculties, of the will, speech; cataleptic rigidity of the movements, insensibility of circumscribed portions of the skin, and of the mucous membranes; the serous fluid in

filtrates into the cerebral pulp, and when the substance is sliced, small drops are seen oozing out, and these become more numerous when pressure is made. This œdema coincides with an accumulation in the arachnoid and in the other cavities; it may occur after an attack of apoplexy in persons whose constitutions are predisposed to serous effusions, and often occurs while resorption is taking place after sanguineous effusion.

When its progress is acute, it may simulate the effects of an apoplectic attack, the accumulation of the serum occurring as a sudden effusion; there is loss of consciousness, paralysis, and coma. It then often happens that the lung becomes congested, the breathing stertorous, and death takes place promptly. This is what was called by the ancients serous apoplexy.

In its chronic form we find all the symptoms formerly noticed in the stupor of the insane, which are those of general, but gradual, compression of the brain, and which is rarely fatal.

Acute Hydrocephalus.

Acute hydrocephalus is very frequent in children, the serum being accumulated chiefly in the ventricles. We have somnolence or coma from which the patient can be roused; he appears to hear although he cannot speak, understands what is said, and puts out his tongue. He can eat and drink, although coughing is excited from a difficulty of deglutition, which appears to depend on a degree of paralysis of the pharynx. If we have the convulsions of trismus, or other serious symptoms, it happens in consequence of the serous effusion becoming complicated with encephalitis or arachnitis. Where the latter complication takes place we have all the cerebral symptoms belonging to inflammation of the brain—headache, continued fever with paroxysms, convulsions, delirium, and vomiting. The disease lasts from ten to thirty days, and is almost always fatal. We sometimes see this hydrocephalus supervene in the last period of cerebral, tubercular, or encephaloid degeneresceence. There is another kind of apoplectiform hydrocephalus that occurs in children weakened by antecedent maladies, more especially the scrophulous, phthisical, or leucophlegmatic: it comes on without other premonitory signs than depression, headache, and drowsiness; often even these signs are wanting, serous effusion taking place into the cavities, and the patient becoming unconscious and comatose. Slight convulsions occur, with illusions of sight; the eye is fixed, the pupil dilated, and the retina insensible. This disease is readily distinguished from cerebral hemorrhage and softening, from the paralysis being never complete, and from the intellect resuming power from time to time. We see some children, especially in the leucophlegmatic state that succeeds scarlatina, suddenly seized with complete blindness, dilatation of the pupils, and slight convulsive movements. These symptoms announce an instantaneous serous effusion into the ventricles, a species of hydrocephalus which yields readily to the use of revulsives, diuretics, and purgatives.

Chronic Hydrocephalus.

This disease depends almost always on an arrest of development of the nervous centres. Breschet affirms, on the authority of a great many autopsies made by him at the Foundling Hospital, that in the fœtus in children born at the full time, and at the age of six and twelve months, he has found a true hydrocephalus in the anterior and median ventricle, or septum lucidum. When its causes are not congenital the child seems to be predisposed to the affection by a general lymphatico-scrophulous constitution, which shows itself by the size of the head, a certain precocity of the intellectual faculties, and an anormal development of the limbs. The state of the encephalon in hydrocephalus varies; for the most part the liquid is accumulated in the ventricles, distending their walls, unfolding the convolutions, and converting the brain into a thin pouch, in which it is difficult to distinguish the white or grey substance. Sometimes the encephalon remains in a rudimentary condition, the cerebrum and crura are entirely wanting; and the pons varolii, irregular and knobbed, is the only nervous centre that can be found at the base of the brain. Instead of the rest of the brain we have nothing but liquid. In other instances there is but one of the hemispheres wanting, and in some rare cases the brain appears to have but one cavity, and to be formed of one hemisphere. The symptoms of hydrocephalus in the child are ushered in by enfeeblement of the senses, listlessness, loss of memory of words, habitual drowsiness, momentary catalepsy, vertigo, severe pain in the head, and disturbed vision; according as the fluid accumulates the intellectual faculties grow weak, the muscles of the face and eyes are agitated with convulsive movements, speech is uncertain, the tongue can only stutter and sometimes appears entirely paralysed, the muscles waste, slight convulsions supervene, and the evacuations are involuntary. All these symptoms are sooner or later followed by complete idiocy, blindness, dumbness, and deafness. Deglutition becomes difficult, the hands and feet cold, and sudden congestion puts an end to this miserable existence.

Hydrocephalus presents itself under three different forms: first, with diminution of the size of the head, a form that is always congenital. The fontanelles are formed, and the sutures ossified; and when this is the case, the accouchement is quick and easy. The children almost always die on coming into the world, or soon after, of convulsions; the head is pointed at the top, and depressed at the forehead and sides; the eyes insensible to the light, and in a state of continued convulsive rotation; the head is in continual motion from right to left, or from before backwards; and the limbs are contracted. In the second form the head is often of the usual size; the disease, too, may be congenital, although it usually occurs at a pretty advanced period of life. This is the cephalic dropsy of Selle, and its symptoms are similar to those which depend on an extreme size of the head. In the third form the dimensions of the head are singularly augmented; when the disease is congenital, it renders the accouchement difficult, or even impossible without perforation. But if the head be not too large at birth, its size increases rapidly in the early stages of infancy. The parietal bones are thrown outwards, giving the cranium an extent disproportioned to that of the face. The globes of the eye gradually lose their mobility, the pupils enlarge with a squint upwards; at a later period, the eyes move from one side to the other like a pendulum, and the loss of smell follows that of sight. Whilst, as a contrast, the hearing remains very acute; and, in the early months, the patient starts convulsively at the slightest noise. At last this sense becomes obliterated like the others; the mouth remaining open, and the saliva flowing from it. Those who, in spite of this advanced state, still retain any intelligence, give expression to their emotions of joy, anger, or fear, by repeatedly jumping on their chair, their feet extended, the arms hanging down, and the fingers flexed in the form of a cup, and they laugh or cry vehemently. The direct cause of hydrocephalus and all its accompanying symptoms is the congestion of fluids, serous, sero-purulent, or purulent, in the cavities of the skull, and producing lesions of the nervous system; the predominance afterwards of exhalation over absorption keeping up the symptoms. As to the anatomical alterations, they may be referred to three different states of the encephalon. First, to the arrest of its development, or the absence of some of its parts; secondly, to the distension of the cerebral pulp and the enlargement of the ventricles from the presence of the fluid. Thirdly, to the presence of serum in the space between the two folds of the arachnoid. The first of these states belongs to the early stages of fœtal development. The second, to a more advanced stage of uterine life, all the parts of the encephalon being completely formed; but the fluid not being sufficiently absorbed, compression takes place, but the individual may live. The effusion which occurs in the arachnoid coincides with complete development, and may date from the earliest period of infancy. Besides the general debilitating causes, the most common are the compressions made by mothers on the abdomen to conceal pregnancy, and hence it is that women who give birth to the largest number of hydrocephalics are the unmarried. The termination of this disease is always fatal, and those who exist with it for a time present all the symptoms of imbecility and idiocy. We may even refer to it as the sole cause of congenital idiocy.

VI. Organic Degenerescence of the Brain.

The lesions of congestion and secretion in the nervous centres are not confined to those already mentioned. Under certain circumstances and the influence of causes peculiar to each individual, the nervous molecules may disappear, and be replaced by accidental products of the same kind as those that are developed in the lungs, liver, and other viscera; the most frequent are tubercles and cancer.

1. *Tubercles of the Brain.*

In form, texture, and structure, the tubercles of the nervous centres are similar to those of other organs; they have been found in all parts of the cerebro-spinal axis, in the hemispheres, above the walls of the ventricles, in the optic tracts, the corpora striata, in the inferior convolutions, in the valve of Vieussens, in the cerebellum, and cervical portion of the medulla. They are more frequently encysted than in other parts of the body, they vary in size from that of a millet seed to that of a hen's egg; an entire lobe may be transformed into a tuberculous mass. Most commonly, they exist in numbers of small size, and coexist with tubercles in the lungs. Louis has remarked that whenever tubercles are found in any other organ, they are never wanting in the lungs.

The nervous pulp surrounding them may remain quite healthy; it is very difficult to distinguish it from the tuberculous matter, being alike in colour. It may, however, have undergone various alterations, such as simple injection, softening, induration, or depression of the convolutions. The membranes are thickened, adherent to each other, injected, and presenting serous effusion; according to A. Latour, such effusion is large around tubercles, or in the meninges in young children; and the acute hydrocephalus is often the consequence of such tubercles manifesting their existence by symptoms of meningitis. They are developed in the nervous pulp indolently, independent of any external influence, and are the result of a perversion of the functions of nutrition and secretion. They chiefly affect infancy from the ages of four to twelve; their progress is insidious, often giving rise only to slight, intermitting headache.

According to their seat, however, they give rise to paralysis, contracture, convulsions, or epileptiform attacks. The intellect is rarely much disturbed; the sight becomes weak or lost.

The progress of tubercles is slow, being quickened from time to time by acute symptoms of delirium and convulsions; their most frequent termination is in hydrocephalus or meningitis; coma and death then follow quickly. Wherever their seat may be, the symptoms they produce are those of compression and irritation, which they determine in the nervous fasciculi affected, and it is from the diversity of these effects that the different lesions of motion and sensation result. A patient with tubercles in the cervical medulla has been known to die in fits of hydrophobia.

2. *Cancer of the Brain.*

This is much more rare than tubercles, and depends also on a general cancerous diathesis. Cerebral cancer varies in size. Sometimes the surrounding brain is healthy, or reduced to a jelly. The meninges are also sometimes affected, becoming injected, inflamed, thickened, and at last presenting the cancerous alteration in greater or less extent; it may be even extended to the skull, and in this manner cases have been observed where cancer of the brain coincided with cancer of the ear, of the ethmoid bone, of the nasal cavities, of the globe of the eye, and of the optic and olfactory nerves.

It has been remarked that a similar relation may exist between cancer of the testicle and cancer of the brain; in several instances the amputation of a sarcocele has been followed by cancerous points developed in the brain and spinal marrow. The

cancerous diathesis is fully as positive as the tuberculous.

Intelligence and motility are affected in the same way as in other affections of the brain. The sensibility, however, shows some symptoms characteristic of cancer: there is violent headache recurring for years, sometimes at the point of disease, sometimes at the opposite point of the head; the pain is lancinating, and shoots to the skin of the face or other parts of the body. The cutaneous sensibility is exalted or wholly abolished; sometimes the itching on the skin is intolerable. The senses are successively paralysed.

M. Rayer has seen several cases of cancer of the pituitary gland, the chief symptoms having been a sense of weight in the head, amaurosis, failure of memory, coma, headache during several years, and contraction of the limbs. The failure of the memory in such a disease is a functional disorder deserving of notice.

In cancer of the cerebellum there are epileptiform convulsions, the head is thrown backwards, there is loss of memory, and the patient walks like a person in some degree intoxicated. When cancer affects the mesocephalon we have singular movements of the eyes, numbness of the limbs; severe pains in the soles of the feet, calves, and knees; with loss of taste and smell, coinciding with unimpaired hearing and intellect.

The other organic alterations that may affect the brain are calculous concretions, fibro-cartilaginous productions, divers cysts, adipose productions, osseous growths, and entozoa of different kinds. These organic degenerescences are very rare; their symptoms are the same as those of all the important chronic alterations of the brain, and vary with the extent, seat, and progress of the organic deformation itself.

VII. General Relations of Alterations of the Brain with its Diseases.

The organic causes which give rise to all other diseases are found in affections of the nervous pulp: abstraction being made for the moment of its intellectual, motory, and sensitive functions; and, taking its anatomical structure alone into consideration, we have seen that its tissue becomes congested, irritated, inflamed, and disorganized, like all other tissues of the body.

Moreover, the absence or excess of sanguineous or serous congestion may, as in other tissues, be a determining cause of morbid modifications. I the brain sanguineous congestion is what sudden blushing is on the face; it colours, and swells it and has a tendency to disappear unless there ha been a violent irruption of blood in the peripheri or central cortical substance, and then it produces very serious symptoms.

There is the same difference between congestive and inflammatory irritation that there is betwee the fire that burns and the fire that does not burn. Another element is necessary to convert sanguineous congestion into irritation and inflammation, and this element physiologically can only be had from the lesion of the extremities of the nervous fibres of sensation. So long as the congestion remains confined to the capillaries, there is only redness and obliteration, but when it extends to the nerves of sensation, then there is pain, efflux of fluid, exaltation of function, in a word, inflammatory irritation, the progress of which is regulated by the well-known general laws of augmentation, exacerbation, stasis, decline, and termination.

In pathological affections of the brain the elements and principles are the same. Inflammatory irritations in the nervous pulp determine the symptoms that are most characteristic of all inflammations. 1. *The redness*—It varies from a rosy hue to deep purple, or colour of wine lees; the difference of vascularization of the white and grey substance causes the difference of their respective shades. The fibrous structure of the white substance makes it less prone to sanguineous congestion, and hence it is that almost all the acute diseases of the brain begin in the peripheric cortical substance, which, through the pia mater, is in direct and constant relation with the elements capable of irritation. In acute delirium, acute or chronic cerebritis, we have met almost always with acute or chronic lesions of the periphery. 2. *The heat*—It is only necessary to place the hand on the forehead, or on the top of the head, to perceive that the heat of the brain is considerably augmented—the common expression is, "My head burns." 3. *The pain* is also shown in headache, sense of weight, and fixed pain. 4. *The tumefaction* is obvious in the convolutions, and throughout the cortical substance, the thickness of the latter being doubled, and being, as it were, granulated and fleshy; the middle layer especially, which appears to contain an enormous quantity of vessels, presents the most marked alterations of redness, consistence, softening, and size both in the acute and chronic state.

These four phenomena, redness, heat, pain, and augmentation, constitute in the brain true local fever, which afterwards shows itself externally by all the ordinary febrile symptoms. It has been said that insanity is an apyretic disease: it is like most other diseases that have passed into the chronic state, such as the chronic exanthemata of the skin, &c. But at its commencement it presents the most decided febrile symptoms: augmentation of the heat, circulation, and colour of the face, to such a degree as to be called cerebral fever. All inflammatory action alters the tissues, and this can be shown more readily in the cerebral pulp than elsewhere. The nervous pulp at first increases in bulk and weight, but it rapidly loses its cohesion; and hence the softening, induration, and partial or general atrophy, which it presents in its chronic diseases. As to the hypertrophy of the white substance in the acute form, as we have met with it in paralytic cerebritis, we must admit that the serum performs the same part in this fibrous tissue as does the blood in those tissues to which it has free access—that is, that it augments its bulk by congesting the capillaries with serum, and producing all the effects of an inflammation which we must call white in contrast with common inflammation.

In acute delirium we find injection of the pia-mater and of the cortical substance. Sub-arachnoid ecchymosis of a deep red, with dotted injection, and often softening of the cerebral surface. These alterations are more decided in the acute or paralytic cerebritis; there is redness, thickening or opacity of the arachnoid, softening of the cortical surface in certain points without adhesion; in other points, adhesion of the pia-mater to the cortical surface, and, in addition, deep softening of the cortical substance.

In the chronic state, the thickening of the arachnoid, the dilatation of the vessels of the pia-mater and of the cerebral substance, show plainly the gravity of the process of congestion and irritation which marked the acute stage. But while the symptoms have abated, a congestive process of irritation, and an organic one of absorption, succeed. The cerebral substance diminishes in quantity, certain convolutions waste, the ventricles enlarge, the cortical substance loses its colour, hardens, and at last disappears.

In the brain, therefore, the acute or chronic symptoms correspond with the acute or chronic lesions of the nervous pulp; when the alteration is local and superficial it causes but a slight cerebral disturbance of the intellect, the locomotion, or the sensibility. When it is more extensive, and penetrates more deeply into the cerebral mass, the disorder of these three functions is more decided. The delirium becomes complicated, with lesion o the movements and the sensibility, as shown ir durable symptoms, as in paralytic cerebritis. When it attacks at the same time the sensitive and motory fasciculi, whose connection is so intimate throughout the entire mesocephalon, and the progress of the disease is more or less acute, we observe all the spasmodic and convulsive affections, and in the state of chronicity and intermittence we have epileptic and hysterical symptoms. In order to the production of convulsions there must be a simultaneous lesion of motile and sensitive nervous fasciculi or fibres.

VIII. Reactions, or Visceral Causes.

Amongst the physical causes of cerebral affections, the reactions of the viscera are important to be observed. The general effect of these reactions is less to disturb the intellectual acts themselves than the manifestation of those acts, that is to say, the manner of being or of acting, the mode of thought or expression, or what we call, in one word, the character or disposition of each individual.

In the circulatory apparatus we may remark certain influences of the lungs and heart; the lungs of themselves have but little sensibility; but when there is inflammatory congestion of their tissue, a dull, pungent, unaccustomed pain, announces to the brain a malady of these organs. The attention then begins to reflect on the necessity of breathing, and on the dangers as well as benefits which life derives from it. If these organs continue to be altered into a compact mass unfit for respiration, if almost all the air-cells are obliterated by the hepatization, the anguish of imminent suffocation is redoubled, the intellect itself is deranged, and a delirium of several days blots from the patient's memory the imminence of the danger which he has run. In chronic affections of the lungs, the slow and profound disorganization of phthisis, their reactions on the brain have a peculiar character. It is by illusions of health and high hopes, and dreams of a long future, that they hide from the intellect their fatal *denouement*. Phthisical persons, in the very last state of marasm, still lull themselves in the most chimerical projects up to the very moment of death. The lungs alone, of all the viscera, possess the privilege of these happy illusions. Is it because of their being placed on the confines of the life of relation and organic life, to use Bichat's expression, and of being exempt from appetites and desires, that they are spared the pain of those desires, the perversion of which reacts painfully from all other sources upon the brain?

In the heart the slightest modifications affect the intellect; as soon as its contractions become stronger, more accelerated, and the circulation consequently more active, the brain experiences an excitation which gives more energy to its thoughts, more resolution to its acts; it is in this sense that we must understand the popular expressions, *hearty, having heart*. But when the organ acquires a morbid development, as in hypertrophy, its influence on the brain becomes morbid also. The intellect derives from it a singular disposition to outbreaks of passion, exasperation, and the most violent agitation from the slightest causes. It would seem as if the tissue of the heart itself had become a perpetual focus of obscure and painful feelings, conferring on the intellect an habitual moroseness and an unwonted irascible violence. Such are the vague reactions that some patients cannot account for at the commencement of organic lesions of the heart. When the disease is confirmed, these symptoms diminish in intensity, returning in the night in regular attacks, and almost at fixed hours, with violent throbbings, painful palpitations, and a suffocation and anxiety which suddenly banish sleep. When the attack is not sufficiently strong to rouse the patient from sleep, the paroxysm reacts upon the intellect in frightful and sinister dreams, the impression of which pursue him through the next day.

We here observe that the disease of a distant organ becomes for the brain a permanent source of obscure sensations, which produce a series of ideas and determinations, more or less bearing on the internal pain which excites them. In the digestive apparatus these reactions are more energetic. The stomach in its natural state, and under certain circumstances, is the seat of wants and voracious appetites which, as in the case of the shipwrecked seamen of the Medusa, may degenerate into a real phrenzy. In certain affections of the stomach, bulimia, for instance, one can scarcely credit the impulses to which such an appetite gives rise. "I saw a woman at the Salpetrière suffering from this complaint, under whose pillow it was customary to place several loaves during the night; the bread having been forgotten on one occasion, she devoured several pieces of skin and muscle from her arm. She had prostituted her person solely to get bread; and at last, so great was her horror of hunger, that she committed suicide.

The slightest derangement in the digestive func-

tions immediately causes a sense of weight in the head, inaptitude for labour, and drowsiness. In chronic gastritis one cannot describe that diversity of illusions of taste and smell which ascend incessantly to the brain, becoming for that organ an obscure cause of internal sensations that are always false. When the chronic affection extends to other digestive organs, the pains increase in intensity, and the sufferings are more deep-seated and undefinable, and hence result a general depression, the most chimerical terrors, the most singular illusions of pain, often even a disgust of life and a desire to die. This distress is but too real, but it reaches the brain as a false interpretation, and we may recognise in these reactions the symptoms of a slight hypochondriasis. In scirrhous affections of the stomach, the brain receives a continuity of impressions of suffering which betrays itself in habitual sadness, a biting sourness of repartee, a hostile disposition that delights in contradicting everything, in seeing everything under false colours, and in construing everything in a bad sense. The reactions of the organs of generation show themselves on the intellect of a woman at the age of puberty. The approach and return of every menstrual period powerfully influence her character, which becomes modified, irascible, unhappy, and the entire body more irritable. This is the prelude to the energetic reactions to be afterwards developed by pregnancy, for then the generative apparatus becomes the seat of a concentration of new forces, extends to the whole organism the effects of its singular influences. In the stomach the appetite is null, depraved, insatiable, and followed by violent vomitings which do not impair the health. In the heart there are lancinating pains and tumultuous palpitations. On the brain the effects of these uterine influences are still more remarkable. The intellect obeys ideas and influences which it cannot understand, and acts which it cannot resist; and frequently the ideas and conduct become sufficiently irrational, and persist for so long a time as to present all the symptoms of a real insanity. Some women are completely insane at each pregnancy, or for a limited period of each pregnancy.

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of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XX.

POMPHOLYX, PEMPHIGUS, MILIARIA.

As proposed by Willan and others.

GENERA.	SPECIES.
Pompholyx	P. Benignus P. Diutinus P. Solitarius
Pemphigus	P. Acutus P. Chronicus P. Infantilis
Miliaria	M. Alba M. Rubra M. Clinica

As propsed by Startin.

GENERA AND SPECIES.	DIVISIONS.	FORMS.
PEMPHIGUS P. Simplex P. Diutinus P. Miliarius	Localis Generalis	Solitarius Sparsus Confertus Acutus Chronicus

GENTLEMEN,—The three cutaneous affections which constitute the subjects that I have proposed should successively follow those which have already engaged our attention, are maladies of which, perhaps, less is known than of any others of equal importance which afflict humanity: I allude to the complaints medical authors have designated *Pompholyx*, *Pemphigus*, and *Miliaria*. This want of knowledge on these subjects arises, I may observe, from three principal causes: first, the rarity and often evanescent nature of the diseases; second, their frequent complication with other maladies of the skin or internal organs; and third, the want of accurate and precise descriptions in those authors who have observed the disease. My own experience, considerable as it has become in the class of diseases forming the subject of these lectures, is yet very limited in these extraordinary vesicular complaints, which, as it were, render manifest to the eye the internal burnings complained of by the sufferers, in a manner precisely similar to that which is evinced by the actual application of fire to the surface of the body, inasmuch as a vesication of greater or less extent is always apparent.

Without further preface, however, I shall endeavour to bring the little knowledge I possess on these diseases into what I trust you will consider useful exercise, by an attempt to simplify the subject; an end it is hoped to accomplish by comprising the three affections under one common description. A reference to the chart before you will at once demonstrate the manner in which this is proposed to be done; and I will briefly put you in possession of the reasons which have influenced me in hazarding the proposition. In the first place most dermatologists, from Bateman to Biett, Rayer, and Cazenave, have either considered pompholix and pemphigus as synonymous terms, or have repudiated the existence of one or the other as a distinct idiopathic affection. In the next place the descriptions of miliaria appear to me to be those of pemphigus occurring during existence of inflammatory or typhoid fever in the system; and that, therefore, it can have no more claim for distinct consideration than eczema, erysipelas, or petechiæ, would be entitled to under similar circumstances; and, lastly, I have thought that, by enlarging the sphere of description of one of these diseases, by admitting into it other similar or identical affections, I should thus multiply the points for observation, and by such means ultimately obtain data for a more clear, and at the same time comprehensive, knowledge of the malady.

With your permission, therefore, the term *Pemphigus*, as adopted by the French writers, shall be applied to this genus of cutaneous complaints, which will be distinguished by symptoms corresponding to the following definition:—Thus I shall consider pemphigus, a non-contagious inflammation of the skin, characterised by eczemation, or the eruption of vesicles, from the size of a millet-seed to that of a walnut, filled with a semi-transparent yellowish liquid, occurring on slightly raised, round or oval, red patches of the cuticular surface; the redness and vesication being nearly simultaneous, and the former not extending much beyond the boundary of the latter. These vesicles, which may be solitary or confluent, and appear suddenly or in succession, terminate by the effusion of the liquid they contain, and by the formation of a thin crust or superficial excoriation, which is ultimately followed by a reproduction of the epidermis. When the crusts furnished by the chronic forms of pemphigus are examined by the microscope, adventitious membranes, or the rudiments of their formation, can be frequently detected, as evidenced by capillaries, filled with blood discs, pursuing a more or less tortuous course amid the coagulated and concreted secretions.

Pemphigus, as above defined, is a disease which may attack any period of life, from the newly-born infant to old age; and it may be complicated with most other diseases of the skin, or with visceral affections of various kinds, particularly those of the liver; in all such cases, however, it cannot be regarded as an idiopathic affection. When speaking of eczema in a former lecture, I then mentioned the aptitude of the human skin to assume what has been called vesicular inflammation, or eczemation, when irritated either from internal or external agents; and the disease under consideration may be held to be the most marked exemplification of this fact or cutaneous law; but I must not omit to remark that constitutional cachexy or idiosyncrasy, consisting in languid capillary circulation, must be present in every case, though it may arise from opposite causes, for example, from repletion as well as inanition of the vascular system. You will perceive, by the chart before referred to, that I have considered pemphigus to consist of three varieties, which I have named—*P. Simplex*, which comprehends the common form of the disease, which, for the most part, supervenes during the existence or at the decline of some other malady, but may exist alone as an idiopathic affection; *P. Diutinus*, which is a more chronic form of the complaint, the eruptions of vesicles being successive; and *P. Miliarius*, which is a vesicular rash occurring during fevers and acute diseases, and seldom attaining, in the size of the vesicles, anything approaching to what is sometimes witnessed in the former species; these three species may be local or general, and they may appear in a solitary, scattered confluent, acute or chronic form.

The eruption may also be ushered in by previous symptoms strictly appertaining to the disease and its varieties, as uneasiness, pain, and irritation in the parts about to be affected, with more or less constitutional sympathy, as thirst, dry skin, feverishness, &c.; whilst in some rare cases it may happen that few, if any, of these symptoms are observable before the appearance of the eruption. Yet, as each variety of the disease is founded on some usually observed peculiarity as regards the symptoms I have mentioned, it may be well to give each of them a brief, separate consideration. *Pemphigus simplex* is characterised by a simultaneous or successive eruption of blebs or vesicles on one region, or over the whole body, which may attain the size of a pea to that of an egg, or larger, when the vesicles become confluent; this eruption is generally preceded by more or less constitutional disturbance, and by oval or round red patches on the skin, which accurately define the future size and position of the eczemation. In a few instances, however, one or two of these spots do not become the seat of vesication, at least it is never observed; but the epidermis is found detached and readily removable even in these situations, and, therefore, it is probable that in the night, or during the hours of repose, a vesicle may have formed, and have become broken and discharged its contents. Each bleb is surrounded with a narrow line of bright redness, the surrounding skin being free from the disease; after a short time the vesicles appear to attain their utmost limit of distention, no two having precisely the same magnitude; in this state they are semi-transparent, being filled with pale yellow serum, like the contents of a burn or blister; and they then burst, sometimes in such a manner as to perfectly discharge their contents; at others a small opening gives exit to a portion only of the liquid, which then becomes turbid, and the cuticle containing it constitutes a flaccid and wrinkled sac, half filled with fluid. In a few days a thin imperfectly-formed brown crust occupies the site of the vesicle for a week or so, when the complaint finally disappears But there may be a succession of similar eruptions, so as to protract the malady for a month or more; this will then refer it to the next variety, for which I have adopted Willan's designation of *Pemphigus diutinus*, successive chronic or lingering bleb, which in reality differs very little from the foregoing species, save in the circumstance which has determined its appellation; as it may persist for months or years, and is, in fact, one of the *most obstinate and rebellious diseases of the skin*. The vesicles are seldom larger than a hazel-nut, and mostly of an inferior size; and they are usually neither so round nor prominent as those of the former-described variety. This disease may also be more strictly considered a disease *sui generis*, as not necessarily attended by the constitutional or organic maladies which are not unfrequently witnessed in the same case. It is, moreover, rarely, if ever, accompanied by any other cutaneous affection, the irritation of which more commonly gives rise to the ephemeral eczemation, characterizing *Pemphigus simplex*. *Pemphigus diutinus* never leaves, but may usually be studied in all its phases on the same subject, each successive eruption of vesicles beginning before its predecessor has taken its departure; the inflammation is also more violent in this chronic form of the complaint, and more apt to assume a purulent aspect, so as to be distinguished with difficulty from impetigo, as in the example of the little patient I have now the opportunity of introducing to your notice, as a well-marked instance of *P. diutinus*, and whose case I shall presently relate.

It has several times happened in the case of this

boy, and it may often be observed in the variety of pemphigus under consideration, that the mucous membranes of the mouth and fauces are attacked with the vesicular eruption, and there is sometimes reason to think that the whole intestinal canal may be more or less implicated.

I may also mention that one or two solitary or insulated blebs of large size (the *Pompholyx solitarius* of Willan) may appear in either of these described species of pemphigus, which may be transitory or acute if belonging to the first species, and successive or chronic if to the second; but I consider the *mere size* of the bleb a circumstance of too trivial importance whereon to found a distinct species of the complaint, as no practical fact indicating the adoption of a different mode of treatment is attached to the appearance in question.

We have now arrived, gentlemen, to the third species of the malady before us, which I have termed *P. Miliaris*. It consists in the eruption (for the most part very suddenly) on any region of the body, of grouped or disseminated vesicles, varying from the size of millet-seeds to that of a pea, and occurring for the most part during fevers or other diseases attended with profuse perspiration, their situations like herpes, to which, indeed, I consider they are closely allied, being over some nervous centre or trunk, the ramifications of which they commonly follow. In a few rare instances the entire surface may be affected, when it would resemble the accounts tradition has handed down to us of several epidemic disorders which have raged at former periods – the sweating sickness of our own country, which occurred in the fifteenth and sixteenth centuries, being amongst the number.

In hot climates, particularly in those where pellagrous affections are common, in Lombardy and other parts of Italy for example, this miliary vesicular eruption is very common, and has been considered to be a true exanthematous fever by M. Penolazzi, who has described it in a well-written paper, published in "The Ann. Univ. di Med., April, 1844." If this be the case, which I consider doubtful, this is certainly not the moment or the place for its consideration, as chronic cutaneous diseases alone form the subjects of our present contemplation. I have seen *P. miliarius* occur in numerous acute diseases, as well as fevers; for instance, in rheumatism, in puerperal peritonitis, during dentition, &c., and also from confining the sick in heated, ill ventilated apartments; whilst the exhibition of opium, mercury, iodine, cubebs, ammoniacal medicines, and other substances of a heating or stimulating nature, have constantly produced it in certain idiosyncrasies.

It must be obvious, from the circumstances now stated, that with ordinary attention there can exist little or no difficulty in distinguishing pemphigus from all other cutaneous diseases; indeed its characteristics are so marked, when the bullæ are unbroken, that, unless in the case of blisters artificially produced, it resembles no other manifestation of cutaneous inflammation. The large vesications attending some forms of erysipelas being readily distinguished from pemphigus by the great tension, redness, and tumour of the part affected, in addition to the very marked difference existing between the attacks, progress, and consequences of the two diseases. Again, the marks left by pemphigus differ from those remaining after eczema or herpes, with which complaints only they might by possibility be confounded, in having a dusky red hue of long continuance, and a more or less circular figure, which is as it were placed in the middle of the sound skin, the line of demarcation between one and the other being well defined, instead of being gradually shaded off, as observed in the last-mentioned affection; while there is little if any regular crust or scab, the loose, imperfectly formed concretions of pemphigus, adherent only by a point, being seen in its chronic forms alone, and manifesting, as I have before observed, when examined by the microscope, an attempt to form a new organization or false membrane, rather than the solid lymphatic encrustations of eczema, which are mostly composed of layers of coagulated albumen, firmly adherent to the parts beneath. It will be obvious, I should imagine, from what has been now said, that pemphigus cannot be a serious disease when it appears in an uncomplicated form, and that, in the latter case, our diagnosis must be founded rather on the nature of the complication than on any danger to be apprehended from the complaint, independently considered; its appearance may, however, like that of rupia, the subject of my last lecture, be deemed an unfavourable indication of the state of the general health, and of want of stamina in the constitution. Of course, this remark has more particular reference to *P. diutinus* of the arrangement we have adopted, for *P. simplex* may be produced from the irritation of common scabies, lichen, or other irritating diseases of the skin wherefore, little importance can be attached to the appearance of this variety under ordinary circumstances, from which fact, indeed, Willan designated the species, *Pompholyx benignus*.

Now, with respect to the treatment of pemphigus, the local measures should be mildly palliative and the internal remedies must be directed to a removal of the cause, whether that be disorder of some particular organ, or a cachectic state of the constitution. The warm bath has been lauded by all writers on this disease as amongst the most useful means of soothing any existing irritation, and of equalizing the cutaneous circulation; whilst quinine, decoction of bark, of the vegetable bitters, and the mineral acids, with opium, are the general remedies most constantly required; it is also often of service to give purgatives and diuretics in the cases, so as to solicit, as it were, other organs to take upon themselves an increase of function, to divert the deranged or excessive action of the skin. A residence in a high situation, a dry atmosphere and nutritious food, with a fair proportion of sound wine when obtainable, are also efficacious agents, the employment of which will, perhaps, lead to fewer disappointments than any others I can mention.

I shall not detain you long by reciting instances of pemphigus, as there is no special treatment required. In the *simple species* (*P. Simplex*) of the disease, a few weeks for the most part suffice to witness its origin and disappearance without the use of remedies; and I have never found *any treatment* of marked advantage in *P. Diutinus* particularly in its inveterate form, where more or less scabious crusts are visible, as in the case of the boy now before us. As models of each variety of this disease have been prepared for your inspection, I shall prefer the citation of the cases to which they belong, though they do not present the marked features of some of the cases which have heretofore applied for relief; but, as I before observed, instances of pemphigus are so extremely rare, that out of nearly 3,000 patients entered on our books during the past year, there have not been more than eight or ten characteristic examples of the disease, and of these the plurality have occurred in the summer season, when our modeller was not at hand.

The model I first submit to your inspection is that of a little girl named Ellen Townsend, aged six (No. 6803), who from her infancy, that is to say since she was two years old, had been suffering from lichen conferus, the appearance of which (for you will perceive it still exists amongst the vesicles of pemphigus) would lead me to infer that it was tainted by congenital syphilis. This little patient was admitted on the 14th of last month only, and the model was taken on the 28th, very opportunely for the illustration of this lecture, which you are aware comes under our consideration as *P. Simplex*, an eruption of pompholyx benignus of Willan supervened as a complication with the original disease, which you are aware comes under our consideration as *P. Simplex*. The relative who attended with this child stated that a similar appearance had on one or two previous occasions presented itself, though never to the same extent; the modeller has shown rather too much redness around the blebs of yellowish liquid; but this I must tell you is necessary, or the colour flies in such a manner as to render the model useless till retinted; you must bear in mind, also, that the pemphigus appeared in the midst of the lichenous eruption, so that greater visible inflammation of the skin was present than is often observed in pemphigus simplex. The bullæ, you will notice, vary from the size of a small bead to that of a horsebean, and they are irregularly distributed; yet in one or two situations they might be confounded with herpes circinatus (of which I shall shortly speak), from their having a somewhat circular arrangement, and also from their position following the distribution of the cutaneous nerves of the thigh and abdominal parietes. This child was taking mercurials in small doses, and also using a lotion containing gr. ss. of the bichloride to an ounce of water. I therefore, in the absence of any other exciting cause that could be recognised, felt inclined to attribute the pemphigus to this origin, which would render it a sort of monstrous *Eczema mercuriale*. There must, however, have been some constitutional peculiarity in the case, as such remedies are in constant and daily use by every one, and such results are rarely encountered. The treatment adopted was to suspend all the means which might be supposed to stimulate the cutaneous circulation; the larger blebs were directed to be punctured with a needle, and powdered starch applied as a dressing by means of a down puff. As some disturbance of the system and feverishness were present, an ordinary saline febrifuge mixture was prescribed, containing a little nitric ether, and the child was purged with Epsom salts and magnesia. In the event of the eruption increasing, she had directions to come here for a mucilaginous bath, and to take an antimonial emetic; for neither of which, as she yesterday told me, had there been any occasion, the pemphigus having very nearly disappeared: the lichen, though better, still remains for future attention.

This case very well illustrates the most usual form of pemphigus simplex. I am sorry I have no recent example to refer to of the affection when strictly idiopathic; but no practical difference exists between the two cases, so that I shall briefly mention the next variety in a form that is sufficiently rare, and, I regret to say, one which has always resisted every kind of treatment I have hitherto employed; a circumstance equally deplored by such important authorities as Biett and Gibert, the latter of whom has specially treated on the subject of this lecture—(*Gibert, Monographie de Pemphigus*). The little boy present, who is the unfortunate sufferer from this inveterate variety of pemphigus diutinus generalis, and whose malady you have now the opportunity of minutely inspecting, is named Michael Laffy, aged ten, residing at No. 8, Price's-court, Gravel-lane. He was admitted on the 1st of September last, and is entered in the register No. 6064. He had suffered upwards of two years from his malady, for which he had unsuccessfully undergone various treatment as in and out patient at other public charities. The model of this case represents the disease as it appeared on admission. You have an opportunity of witnessing the progress made in five months. I wish I could say it was more marked, yet I think we may pronounce him better. To tell you what remedy has seemed to have had the greatest share in producing this result is beyond my power, as he has tried a considerable variety, both internal and external. Iodine in various combinations, chalybeates in vegetable bitters, sulphurous remedies, the mineral acids and opium. The external agents have been as various, stimulating lotions, and ointments containing sulphur, iodine, lead, zinc, and bismuth; and baths also of various kinds have been tried. Yet, perhaps, out of all this farrago, a mixture composed of small doses of the dilute sulphuric acid, with moderate doses of opium and a lotion containing the tris-nitrate of bismuth, have been followed by the best results; still very much has yet to be done. The slight crusts formed by this boy's disease exhibit very beautifully what I have mentioned as regards the formation of false membranes in this variety of pemphigus—as you will perceive by the microscope in the room—thus you may observe the rudiments of numerous capillaries in which the blood discs or globules are arranged like a string of small beads. I do not remember to have witnessed this appearance

in any other cutaneous crust, though I hav constantly found it in this and other cases of pemphigus diutinus, nor am I quite sure that it results from the cause I have assigned, for much patient research is still required before I can be supposed to have arrived at the required accuracy in this new field of inquiry. With respect to the third, or miliary variety of pemphigus, I have met with but few of such cases where the body has been generally affected—perhaps three or four in a practice of eighteen years, six of which have been spent in large hospitals, and I do not remember that more than one of these has occurred amongst the patients of this institution, this was in a consumptive young woman of the name of Stone, a relative to Mr Stone at the College of Surgeons. She suffered extremely from night sweats, the result of hectic fever, when, from some cause unknown, these symptoms all at once disappeared, and a fever, which I regarded as of the simple, continued type, was manifested, with the usual signs of heat of skin, loaded tongue, &c. In a day or two an eruption that I at first thought was varicella (chicken pox) appeared all over the body, but the vesicles never attained the size observed in that disease, nor did they follow the same course many disappeared in a few hours few appeared to break, and when this happened, it soon became difficult to find the spots they occupied, as they left little if any redness on the skin, and no crust or desquamation. No sooner had this eruption thus shown itself than the feverish state disappeared, and in three days there was scarcely a trace of the eruption the hectic and night sweats returned, and conducted my patient slowly along the path on which they have led so many others, till they reached "that bourne from which no traveller returns." This young woman's disease may be regarded as a case of sudomina, and, perhaps, with justice but I would not exclude the complaint designated under this variety of pemphigus a true *miliary fever I have never seen*, and, therefore, beg you will not consider that it is intended to describe it in any of the definitions I have this day attempted those parts that would seem approximating to it, portraying acute forms of the different varieties of pemphigus I would mention that a local eruption of miliary vesicles (*P. Solitarius*) is often witnessed in various acute diseases, accompanied by profuse perspirations, as before remarked in respect of *P. Simplex*, to which variety, when these vesicles attain a larger size, they become referable.

In one of the models you will observe on examination of this circumstance. The pemphigus here had arisen in a child's arm after vaccination, which occasionally happens and you will perceive miliary vesicles intermixed with bullæ and their excoriations, and a few attempts to form the imperfect encrustation characterizing this rare and curious disease.

Next week, gentlemen, our meeting shall be occupied with the disease of the skin to which the moderns have attached the name of HERPES.

ORIGINAL CONTRIBUTIONS.

REPORTS ON DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

MALIGNANT DISEASES.

I approach this subject with some degree of unwillingness, not only from the feeling that I am able to offer but little information as regards the treatment of these terrible maladies, but because their nature and causes, and the phenomena connected with their origin, are but little known, giving rise to considerable diversity of opinion.

I believe I shall be correct in saying that there are three forms of malignant organic disease which are recognised as affecting the uterus—viz., two of a fungoid character, cephaloma, or medullary sarcoma, and hœmatoma, commonly called fungus hœmatodes; and, lastly, that peculiar deposition of hard structure terminating in destructive ulceration called cancer.

The two first resemble each other pretty closely in many respects both in the symptoms which they produce during life and the appearances they present after death they may also, when they require it, be very similar.

Cephaloma, the medullary sarcoma of Mr Abernethy—the soft cancer or brain-like tumour, as it has been called—is a soft organized vascular mass, greatly resembling brain in appearance except, perhaps, that its colour when fresh cut, is of a darker yellowish green than brain when a large section is made it presents an indistinct arrangement of numerous circular portions or divided lobules somewhat like what is seen in fibrous tumour. The brain-like portion has little or no trace of vascularity, but is of an unctuous consistence, smearing the knife which cuts it. The chief vessels belonging to the mass appear to run between the lobules to which I have just alluded, having their matrix or bed of interstitial cellular tissue. I presume that the tumour is covered with a delicate membrane (probably an extension of the mucous membrane), as is seen in fungus hœmatodes but when examined after death the disease at its surface has already passed so entirely into that state of ragged softening, which always takes place after a certain duration, as to render it no longer distinguishable, although I think it has been pretty evident, on several occasions, when seen during life, through the speculum.

Cephaloma varies considerably in its modes of appearance. Sometimes the whole uterus is pretty uniformly involved in the disease. The organ is considerably enlarged and thickened viz., to at least twice if not three times the natural size, little or no trace of the natural uterine structure being left. The pulpy ragged softening, to which I have just alluded, always commences on the internal surface of the uterus, and generally at the os which becomes quickly lost in the destructive process which is now set up, so that we might safely presume this to be the spot at which the disease usually begins. If we have the opportunity of examining before the process of softening has commenced, we shall find the os uteri much enlarged and even the cervix considerably thickened, the whole harder than usual, and after a while more or less irregular from nodular growths. If these are not yet perceptible externally, the finger seldom fails to detect them when passed through the os uteri internum the whole uterus, as felt per vaginam, is large, hard, and fixed, and examination of its cavity, whether with the finger or sound, is generally followed by a discharge of blood, although but little pain is produced at the time. If, however, the disease be of still longer standing, a ragged orifice with soft pulpy edges, leading to a cavity filled with masses of a similar character marks where the os and cervix had been.

Cephaloma occasionally assumes a polypoid form. The mass is frequently continuous with the os uteri, of which, in fact, it appears to be a prolongation, in other cases it rises by a broad base from the whole side of the uterus, tapering off into a pedicle of moderate thickness where it passes through the os uteri, and again expanding into a mass of considerable size in the vagina.

When it assumes the polypoid form it is always much more firm and hard than in other circumstances, whether this be attributable to the contact of the external air I cannot say, the growth itself appears quite insensible to the touch, and does not bleed so easily.

This disease is capable of spreading, like fungus hœmatodes, to the bladder, rectum, and adjacent viscera. From my own observations I should be inclined to say that it attacks the bladder much less frequently than fungus hœmatodes, while it spreads to the neighbouring coils of intestine more frequently. These are soon glued to the uterus and to each other by cephalomatous matter, and studded with tubercular deposits in their structure.

Although as a general rule it is by no means difficult to pronounce as to the existence of fungoid disease of the uterus, it is not always easy to distinguish cephaloma from the other malignant uterine diseases, especially in its early stage. The discharge which accompanies cephaloma usually consists of a variety of ... the menstrual ... come irregular, dark, and ... profuse or sparing, watery ... greenish watery ... at times streaked with blood, or ... shred-like portion of fibrinous matter ... it is generally fetid, and stiffens ... which has been moistened by it. Pain is not often a prominent symptom of this disease, there is pretty constant uneasiness about the pelvis, with sense of weight and bearing down, there is generally more or less hæmorrhoidal congestion present and, if the os uteri is beginning to soften and break down, pain of one or both hips. There are none of the acute agonising plunges of pain through the pelvis as seen in cancer, by degrees pain and difficulty are experienced in the evacuation of the bowels, and these necessarily increase as the disease spreads. The powers of digestion fail, so that with the constant watery discharge, and occasional attacks of hemorrhage, emaciation and debility rapidly advance, and the patient's appearance soon assumes that sallow cadaverous hue which is so well known as indicating the presence of malignant disease.

On examination we find the os and cervix uteri considerably enlarged. The transverse fissure which the os forms much elongated, the lips larger and more solid, the whole cervix more bulky and, as far as can be reached by the finger per vaginam, the uterus increased in size, solid, and more or less fixed in the pelvis. The os uteri is seldom found open in the earlier stages of the disease, although it never fails to be so as it advances, it is pervious to the sound, but will not admit the tip of the finger to pass. By degrees, however (whether this be a result of gradual softening or breaking down of its tissue or from other changes I know not), the passage becomes wider, and, if the finger be introduced some little distance, it will detect the upper portion of the canal becoming soft and pulpy. The ... state of the os uteri at an early stage of disease is mostly seen in scirrhus, where its structure is semi-cartilaginous to the feel, and there is as yet no breach of surface in the part. The sound when introduced into the uterine cavity rarely goes much beyond the ordinary extent at first, although the distance to which it passes increases somewhat afterwards, but it communicates the feeling of being in a cavity which is less moveable than that of the healthy uterus. And as the disease advances, the cavity evidently increases in size. The inner surface of the uterus bleeds readily, so that the sound is generally found besmeared with a slimy bloody fluid. That the whole uterus is increased in bulk we can readily detect by the impulse which is communicated to the sound, or to the finger applied to the os uteri, when pressure is made with the other hand above the pubes. Examination per rectum will also confirm this fact.

The inferior segment of the uterus is sometimes uneven and knobby from tubercular growths within it substance, this, however, is more frequently ... With the further progress of the disease the opening into the cavity of the uterus becomes larger, more pulpy, and irregular, the characteristic features of the os and cervix uteri are gradually disappearing and becoming obliterated, and nothing is felt but the swollen convex inferior segment with a shapeless ragged, soft-edged orifice, through which the finger generally can feel a number of nodular growths, which occasionally become detached during the examination, and, when brought away by the finger, show, beyond all doubt, the real nature of the disease.

I am sorry to confess that I can offer nothing on the treatment of cephaloma in its early stage, for at this period the patient seldom is compelled by the severity of her symptoms to consult a practitioner, and even if she does, the features of the disease are still so obscure as to afford him but little data for the discovery of its real nature. The symptoms of gastric derangement probably excite most attention, although I do not think them so marked as is often seen in cases of cancer. Neither, as far as I know, do we meet with a small isolated

solitary tubercle of cephalomatous structure in the os or cervix uteri, as is seen both in hœmatoma and cancer; but the disease seems to pervade the whole uterine tissue, the natural structure becoming gradually lost in the cephalomatous deposit. Our treatment, therefore, will chiefly consist in maintaining the general health, and combating the local symptoms as they may arise.

Whenever the system is beginning to suffer under the effects of malignant disease, whatever may be its nature, a state of the circulation is produced very similar to, if not identical with, that in chlorosis; and, as in this disease, as soon as the functions of the chylopoietic viscera have been somewhat regulated, chalybeate medicines become a most important means for supporting the powers of the system. When properly combined, they may not only be safely but also advantageously given, even under circumstances of considerable gastric derangement; and I cannot help thinking that the progress of malignant disease may be considerably retarded by the improved tone which they impart to the system. The circulation improves in strength, the flabby skin and soft muscles become firmer and more healthy to the feel, the sallow chlorotic hue gives way to a more natural tinge of colour, and the various functions of the system are performed more effectively.

The local treatment consists chiefly of emollient and sedative injections, as Decoct. Papaveris, with or without the Liquor plumbi diacetatis. In a more advanced stage I find a combined chalybeate and sedative lotion useful, which I have long been in the habit of using in every form of open malignant uterine disease; viz. eight or ten grains of sulphate of iron and extract of cicuta to the ounce of distilled water. It checks the profuseness of the discharge, renders it thicker and less watery, and allays pain.

If the disease assumes a polypoid form I think that the ligature is not only justifiable, but necessary. I am aware that such a plan of treatment is not recommended in disease of this character, but I can truly say that I have never seen any injurious result from its use in cephaloma; on the contrary, I have never seen it fail, when not used at too late a period, to produce great relief. In several cases where the health has been much broken down, and the powers of the system evidently sinking, such an improvement has followed the removal of a polypoid mass of disease by ligature, that the patient has for a time supposed herself entirely cured; the pain and discharge have ceased; the appetite, strength, and appearance have improved; and, for a while, the symptoms of the disease have nearly disappeared, so that two or more months of life, with comparative ease and health, have been obtained for the poor sufferer. No hemorrhage has occurred in these cases; the ligature makes its way through slowly, and requires to be tightened every twelve hours; the part below the ligature shrinks considerably, so as to be less than half its original bulk when it comes away, and the excessive fœtor of the discharge requires the frequent injection of warm water with chlorinated lime, &c., to keep the patient comfortable; circumstances which may easily be anticipated from the structure of the mass to be removed.

A CASE OF ENCEPHALOID TUMOUR OF THE BLADDER.

By F. A. BULLEY, Esq., F.R.C.S., Surgeon to the Royal Berkshire Hospital, Reading.

I was requested to visit Thomas Plumridge, aged thirty-eight, in the afternoon of June 5, 1845. I found him in bed, very much emaciated and suffering greatly from fever, which appeared to be of the h[illegible] kind. He had extreme thirst, a very quick and feeble pulse, and for some days previously had been troubled with a constant diarrhœa, which had weakened him considerably. His countenance was sallow and anxious. The principal pain of which he complained was in the scrotum, which was of a dark red colour, and enormously distended, with fluid diffused in the cellular membrane on both sides.

In the situation of the bladder there was a firm elastic swelling, seemingly occasioned by over-distention of the organ, and, as he had passed very little water for a day or two, I introduced a catheter, and drew off about a pint and a half of dark-coloured urine mixed with some partially dissolved coagula of blood. Having done this, I again examined the part, and observed that, although the more prominent and elastic enlargement had subsided, there remained a hard mass of diseased structure behind, which, it was evident, either involved the posterior portion of the bladder, or occupied the space between the bladder and the rectum, but it was apparently immoveable, and had a very rough and irregular surface. He did not, however, complain of any particular pain in this situation, but referred his sufferings principally to the anasarcous distention of the scrotum, which was speedily relieved by a number of small punctures being made in it with a lancet. Both legs, as well as the cellular membrane round the anus, were also in an anasarcous state. He had been so ill as to be obliged to give up his work for about six weeks, and for the last fortnight of this time had been confined to his bed; but his health had been failing for a considerable period, as latterly for a year or two, he had passed his water only in very small quantities, and almost invariably mixed with blood.

The history of the progress of his case I ascertained from his relations to be as follows:—He was originally what might be termed a tolerably strong and healthy man. About three years ago he had been employed as a labourer in a gas manufactory, and in this occupation had been subject to great vicissitudes of temperature and exposure to damp at night, and had, moreover, got into the habit of drinking largely of beer and water, of which latter it was said he took immense quantities.

He had never felt any particular pain in the situation of the bladder, but for a long time had experienced a great difficulty in passing his water, which was generally mixed with blood, and the quantity that he lost in this way at last rendered him so weak that he was no longer able to follow his work. His wife had remarked that his complexion had latterly become very sallow, and, although he had never himself complained, she thought that he gradually became thinner, and that his health had begun to fail.

For the purposes of better observation and convenience I had him removed to the hospital, where it was found necessary to introduce the catheter daily to relieve the bladder; but on the third day after his admission he died. It was observed that, during the last two or three days of life, the superficial veins of the abdomen became remarkably distended, and continued so until his death.

Inspection of the body twenty-four hours after death. On laying aside the parietes of the lower part of the abdomen and opening the urinary bladder, it was found to be partially distended with urine, containing a number of small light-coloured coagula of blood. The anterior half of the organ was apparently in a healthy state. Posteriorly a large irregularly-shaped encephaloid or medullary tumour had been formed between the peritoneum and the muscular coat of the bladder, extending from the fundus downwards, to within three fourths of an inch of the prostate gland. Owing to its greater thickness at this lower part it had encroached so much upon the rectum behind as almost to close its passage; and it is probable that the pressure of the tumour operating on the trunks of the hemorrhoidal veins had thus been the cause of the œdema round the anus, and, by its pressing upon the intestine, of the almost constant diarrhœa to which he had latterly been subject.

The anterior portion of the tumour projected into the bladder and formed a number of flat fungous growths of a darkish colour, composed of a soft brain-like substance, the same as the greater part of the mass of the tumour behind it, but much more vascular. The surface of one of these fungoid excrescences had been broken probably by the catheter, and this breach appeared to have been the source of the hemorrhage, although the whole of this vascular surface had most likely exuded blood at times.

On cutting through the tumour, three different states of the encephaloid disease were observable. At the upper portion, or that part of it on a level with and behind the fundus of the bladder, the medullary mass was in a state of softening, and easily broken down, a quantity of what appeared to be pure pus being diffused in its substance. Below this the section was precisely similar to that of a healthy brain, and in this there was no approach to softening. At its lowest part the tumour was of a firmer consistence, more fibrous, and resembling, in some degree, the texture of a scirrhous tuber, intersected by membranous septa. The termination of the ureters in the bladder was not at first discernible, the valvular arrangement having disappeared; and it was only by tracing the diminished capacity of these canals from the kidneys downwards that their openings could be discovered; below they were almost obliterated by the pressure of the mass, but above they were dilated to more than double their usual size.

On removing the left kidney from the body, it appeared to be studded over its surface with the same medullary disease, raising the investing membrane so as to give it an irregular nodulated appearance. On dividing it on its convex aspect, these nodulated elevations were found to be portions of medullary deposits which passed downwards in striated masses through the cortical and tubular portions, with healthy structure intervening; the pelvis, as well as the upper portion of the ureter, was greatly dilated; the right kidney, which was apparently in the same state as the left, was not examined.

The general structure of the liver was healthy; but in the upper part of the left lobe was a yellow elevated spot, caused by a deposit of medullary matter of medium density, of about the size of a small hen's egg, surrounded by a slight membranous cyst.

Both the lungs were equally studded with minute and exceedingly soft medullary deposits, apparently fused into the reticulated structure; but without any displacement or removal of the natural texture of the organs, such as is observed in tubercular and common cancerous deposits.

The heart was remarkably small, and its muscular structure somewhat flabby and pale-coloured; but it was closely invested by the pericardium, and there was no evidence of its being in any way diseased. In the left auricle was a large piece of light-coloured fibrine, filling about half its cavity, and extending for some distance into the openings of two of the pulmonary veins.

On cutting into that portion of it contained in the auricle, I observed in its centre a mass of what appeared to be medullary deposit in every respect similar to that found in the other parts of the body. It is probable that from the distended state of the superficial abdominal veins, and some difficulty the patient had experienced in breathing a day or two before he died, that this fibrine had been forming during that time, and that the deposition of medullary matter in its centre might have been the last effort of the system to relieve itself of the formidable disease under which it laboured, or, which is more likely, that it had become stagnated in that situation: the vis vitæ being at that time too feeble to separate it entirely from the mass of the blood, and deposit it among the morbid collections already described.

The blood remaining both in the arteries and veins of the body was of a dark treacly colour and consistence, apparently devoid of fibrine, and altogether in a very unhealthy state. On the outer side of the right leg, about its middle, was an elastic swelling, but without any discolouration of the integument covering it, which I have no doubt was caused by the same kind of disease as affected the viscera; but as time was pressing I had no opportunity of ascertaining its exact nature. There was no appearance of disease of the stomach or any part of the intestines, or of the mesenteric glands.

REMARKS.

I have related the foregoing case simply as an example of the medullary sarcoma in different stages of its development, and as affecting different parts of the body.

It will have been observed that, although the disease infested a number of organs in the body, it presented a different appearance in different situations. In one part the medullary deposit was of a firm and fibrous nature, whilst in others it presented the ordinary brainlike appearance observable in such cases. One part of the principal tumour behind the bladder had apparently either degenerated into pus, or pus had been effused into its substance through accidental inflammatory action, with which the system seemed to have sympathized, as shown by the hectic or irritative fever with which the patient was affected some time before he died.

It would be difficult to account for the different degrees of solidity which the morbid masses presented in the different parts in which they were found; but it is probable that the denser portion of the pelvic tumour had been formed first, as it was only from this portion of it that the fungoid granulations which projected into the bladder seemed to spring; and as the difficulty and pain in making water, with the discharge of bloody urine, were the earliest observable symptoms of his complaint, it is fair to infer that at that part his disease had commenced, and that the corpuscles of altered fibrine, exuded or deposited at first, were of a firmer consistence than subsequently, after his system had become debilitated by his protracted illness.

The medullary matter which had been fused into the areolar tissue of the lungs had been evidently only recently deposited, otherwise the patient must have experienced some feelings of an interruption to their healthy action while the deposit was going on. On the contrary, he had never, during his illness, been troubled with a cough, or hurried or painful breathing, or manifested any other symptom which would lead one to believe that his lungs were in any way affected; and it was only on the day before he died that any, the slightest evidence was afforded of the disease having invaded these organs; therefore, it may be assumed that these, with the other softer specimens of the deposit, had been formed at a later period of the disease.

Probably the latest effort of the constitution to separate the morbid elements from the circulating mass was exercised in the production of the deposit within the fibrous clot in the auricle, when the powers of the system were too low to allow of the disease being exuded or deposited in the larger medullary collections at a distance from the heart.

It may be a matter of doubt with some whether this central portion of the fibrous clot was really composed of the same medullary matter as formed the morbid masses in the other parts of the body; but, although I had no opportunity of examining it microscopically, I have every reason to believe, although of course I cannot speak positively, that it was a strictly analogous deposit, both from its general resemblance to the latter, and also from its entire difference in colour and appearance from the fibrine in which it was enclosed; and as there have been numerous instances recorded of medullary matter having been found in the blood, both of the arteries and veins, in cases of sarcomatous disease, it is not improbable that in this case it may have been circulating in the blood, and separated from it in this manner, during the last day or two of life.

I am unable to offer any particular opinion as to the cause of the occurrence of this formidable disease, but it is allowed on all hands that it is accompanied in its progress by symptoms of great general debility and feebleness of the circulation; it would appear, also, that through the operation of causes which influence its production in the system, or through some vital action with which we are unacquainted, the fibrine of the blood becomes altered from its natural healthy state, existing as an extraneous matter in the circulation, and that it is deposited through the natural endeavours of the system to rid itself of a noxious agent, in situations which, through injury, some peculiar irritation, or other causes, may be predisposed to receive it.

It is worthy of remark that the disease had not in any part of the body, with the exception of the bladder, assumed a hœmatoid character. Perhaps it was because the medullary matter had not been effused into any particularly vascular cellular tissue; and, although it was evident that it had been effused into the liver and the lungs, it had apparently been deposited very recently, and had not had time to erode the vessels and separate them from their natural connection in such a manner as to produce the peculiar appearances observed in this form of the disease.

I cannot better illustrate the causes of this peculiar hœmatoid condition than by quoting the remarks of an eminent writer in "The Cyclopædia of Practical Medicine" (Dr. Kerr). Speaking of fungus hœmatodes, he observes:—"That the local effect is, as in the case of other tumours, a morbid secretion, is undoubted. From its consistency it readily insinuates itself into the interstitial cellular substance, separating the vasa vasorum from their natural attachments; and, by constantly exposing the external parietes to the action of a semifluid, they may be said to undergo a kind of maceration, and hence so to degenerate as to become unequal to the retention of their contents, or readily lacerated by the slightest local injury. Thus we consider the hemorrhagic tendency to be secondary, and superadded to the secretion itself; an opinion which we conceive to be verified by the appearance of the tumour, as seen in a state of ulceration of the mamma or extremities, as modified when it occurs in the glandular structure of the testicle, or as inspected when separated from the body, and carefully washed with water."

In a remarkable case of fungus hœmatodes of the forearm, which came under my notice some years ago at the Reading Dispensary, it appeared to me that the hœmatoid character of the tumour had been produced by a constriction of the blood-vessels, which pervaded its substance, exerted upon them by the edges of the fascia under which it had originally formed, and through which it had subsequently passed in its progressive increase. The patient had undergone amputation on account of a dark-coloured fungoid tumour on the anterior part of the forearm, of about the size of a large orange, which had been removed three different times, and had as often been reproduced. After each operation the wound had apparently healed, but, within a few months, the tumour had reappeared, stretching the cicatrix, which was large, owing to the disease having been removed by incisions round the base, giving it a smooth and shining appearance, until it ultimately attained its original size. On account of its unconquerable disposition to return, it was determined, in consultation, to amputate the arm. On inspection of the amputated parts, the tumour, which was of a dark purplish colour, and covered with what appeared to be the expanded cicatrix of former operations, was found to be composed of a softish brainlike substance, with an immense number of blood-vessels traversing it in every direction, intermixed with clots of blood which had escaped from the distended and ruptured vessels. On examining the base of the tumour, it appeared to dip down into the muscular structure underneath, through an exceedingly small opening or slit in the fascia, the edges of which had assumed a somewhat rounded state, and were not apparently affected by the disease. This portion of the morbid growth, which was almost as large as a small marble, presented an entirely different structure to that of the bulk of the external tumour, with which it was evidently connected. It had none of the hœmatoid appearance, but the section of it was of a yellowish colour, and similar in all respects to the ordinary medullary sarcoma as usually described. Two or three large vessels passed through the small slit in the fascia to supply the external tumour, and, as far as I was able to judge, the constriction of these vessels by the edges of the slit had caused an accumulation in, and rupture of, the vessels within the tumour, and had thus given it the peculiar hœmatoid appearance it had assumed. Had it been possible to remove the small portion of the disease which seemed to have been the nucleus of the successive reproductions, the reappearance of the morbid growth might, at least in that part, have been prevented.

It may be a matter of interesting inquiry as to how far the exceeding smallness of the heart may have been capable of influencing the production and progress of the medullary disease in the subject of this paper. It is certain that, in the majority of such cases, the heart has been found to be preternaturally small, not as if wasted and shrunk, as it sometimes becomes in the course of a protracted illness of an ordinary kind, from an originally healthy size, but bearing the appearance either of a defective congenital organization or of an arrest having occurred to its development—a pathological condition not to be mistaken, from the pericardium in such instances being equally defectively developed, and no larger than necessary to envelop the naturally small-sized organ; whereas, in the case of a heart wasted from a normal size, as happens in chronic non-malignant diseases, the pericardium does not shrink or contract in proportion to the wasting of the heart within it; and thus a difference between the natural development of the two organs may distinguished.

If it be true, therefore, that a defective organization of the heart is pathognomic of malignant diseases, it is fair to infer that the feeble circulation resulting from this condition, at least as far as the arterial current is concerned, would favour the deposition of molecules of altered fibrine in situations disposed, from peculiar circumstances, to receive them much in the same way that a slow-running stream of water deposits more of its solid contents than one that is subject to more active motion; but it may also happen that, owing to the correspondingly small size of the auricle, there may be a retardation of the venous stream which may equally favour a deposit of morbid matter.

The treatment of long-standing cases of this fearful disease can, of course, be only of a palliative nature; but, reasoning upon the hypothesis I have advanced, I should say that, in cases where there was reason to suspect its commencing existence, or, if it were possible to form a diagnosis of its presence at its earliest invasion, it would be proper to, do everything to promote a healthy and vigorous action of the heart, by gentle and well-regulated exercise, pure air, and wholesome food, with medicines calculated to increase the general force of the circulation, on the simple principle, that while other muscles of the body, through exercise, become strengthened and enlarged, the heart might likewise become so beneficially affected as to enable it to exercise its functions in a more healthy manner, and thus render the system less liable to those diseases which appear to arise from, or are at least accompanied by, an habitually feeble circulation.

TREATMENT OF CHOLERA.

By JOHN KING, Esq., Surgeon.

Subjoined are eight cases which I have selected from many more to show the effects of the terchloride of carbon in the treatment of cholera. I head the cases by a general summary of the symptoms present and effects produced by treatment.

SUMMARY OF SYMPTOMS.

Premonitory diarrhœa and griping pains in the bowels, of varied duration, from one or two days to three weeks, the pains becoming more severe suddenly, and most frequently at midnight; vomiting and purging incessant, at first black and watery, changing to the rice-water or gruelly character. Violent cramp in stomach, back, and extremities, from the toes to hips, and fingers to shoulders—in some cases all over the body, and, as the patients expressed it, "as if drawn from limb to limb," with tingling sensation in the fingers running down the arm, the tips of fingers feeling sometimes "as if dead." The matter vomited bitter, or sour and bitter; aspect collapsed; extremities at first cold, clammy, and shrivelled; dark coloured from stagnated circulation; extreme exhaustion; some patients having got out of bed were unable to return to it; shivering, followed by heat and profuse perspiration; the warmth in extremities imperfectly restored during febrile reaction; sense of intense burning heat; great restlessness and anxiety; sinking faintness; constant and excessive thirst; tightness and oppression in præcordium and around lower part of chest; voice faint and whispering; pulse small and feeble, from 80 to

90; urine generally suppressed, from twenty-four hours to eight days; in two instances the urine was free and troublesome. In some cases no vomiting, in others no purging, but one or other present in all. The duration of disease [illegible] medical treatment commenced, from [illegible] to thirty-six; the patients complained [illegible] ness of joints and great debility after [illegible]

The terchloride of carbon was [illegible] in mixture:—

℞. Terchlor. carbon, ʒj.—ʒij.
Magnesiæ carbon. ʒij.
Mist. camphoræ, ℥vj.—℥viij.

Two or three tablespoonfuls every two to four hours, or as the recurrence of cramp requires. The following pills or powders were also given every two to four hours:—

℞. Hyd. chlor., gr. ij.
Pulv. ipecac., c gr. iv., vel. opii., gr. ¼.
Sodæ sesearb., gr. v.—x. ft. pulv.
℞. Hydr. chlor., gr. ij.
Pulv. opii, gr. ¼.
Pulv. ipecac., gr. ss.
Pulv. camphor., gr. ij.
Extr. gentian., gr. iij., in two pills.

One or two mixtures, and from six to ten powders or pills, were sufficient to allay all tendency to return of the disorder, and to establish a healthy state of the secretions of the primæ viæ.

In all the cases the warm glow in the stomach, produced by the terchloride, and the almost immediate relief from sickness and cramp, were referred to by the patients in very grateful terms, in every case within five minutes relief was obtained, and was visible in the countenance, which immediately lost its anxious expression of suffering. The mixture was given first, or with the pills.*

In these cases the tendency to febrile reaction, so marked a character of the prevailing disorders of the present season, was conspicuous, and, moderating the state of collapse, rendered the disease more amenable to medical treatment. The disease in this respect, but I believe in no other, differs from the epidemic cholera of 1832 and 1833.

CASES.

No. 1. Martha Shirley, aged 77, 10, Upper William-street. On Monday, July 27, "was suddenly affected with griping pains in the bowels, vomiting and purging; cramps of legs, feet, and hands, and generally over body; evacuations, upwards and downwards, quite black." This attack moderated without medical aid. On Wednesday, at one A.M., cramps became violent; constant vomiting and purging; evacuations like thin gruel; aspect collapsed; extremities cold, clammy, and dark-coloured from stagnated circulation; incoherency; tightness and weight in the epigastric region, and around the lower part of chest; heat and drenching perspiration followed, coldness and heat alternating; stools passed from her unconsciously in bed; urine suppressed, strength prostrated, voice faint and husky, great thirst, pulse small and very feeble. On Wednesday and Thursday the stools ran from her as she lay in bed, and were like rice-water. In the evening they became pitchy, black, and of greater consistence; on Saturday they were natural. Improvement was progressive; the cramps were relieved almost immediately by mixture, of which she took a dose, containing half a drachm of the terchloride; the system was also slightly affected by the calomel; the eight-ounce mixture was repeated once.

2. Caroline Marshall, aged 32, 11, Charles-street, washerwoman. Spare and bilious habit. For three days had griping pains of bowels. On the 28th of July, while at work in the evening, became affected with cramps in all her limbs, and generally over the body; legs and body "doubled" in consequence; pain in back and chest; breathing difficult; vomiting and purging incessant, and varied in colour, green, black, and latterly white like gruel. In this state continued till the 30th, when she was first visited. From two to five o'clock A.M., cramps were very severe, and before taking mixture, extremities retained feeble warmth; perspiration "[illegible]," alternately hot and cold. [illegible] before I saw her, [illegible] and tips of [illegible] cold and "as if dead;" [illegible] "as [illegible]" [illegible] thirst excessive, drank a [illegible] of cold water in two hours. [illegible] Wednesday to Monday following [illegible] Obtained immediate relief from mixture, of which she took two bottles. This case, as well as the former, was visited by Dr. Doyle, of the Portland-town Free Dispensary.

3. William Harrison, aged 42, carpenter, 3, Barrowhill-road. Tall spare man. On Sunday, 19th July, was seized with cramps, retching, and purging every five minutes; cramps in toes and every joint, hips, shoulders, &c., "as it pulled from limb to limb", purging at first dark and watery. Had been seen by another medical gentleman on Sunday and Monday, and took some powders and a mixture. On Monday night, when I first saw him, the dejections and vomit were like gruel; legs and hands cold, warmth alternating, cramped when cold, the least movement of limbs induced cramp; the urine suppressed for two days; pulse feeble; severe and constant thirst; great heat and sense of burning; tightness around chest, with difficulty of breathing and pain in præcordium; great exhaustion. The mixture relieved the cramps immediately, and whenever they threatened the mixture was had recourse to with the effect of quelling them and producing reaction. He took one bottle of mixture.

4. Henry Lewis, aged forty-five, 14, Charles-street, commission-agent; leuco-phlegmatic. On Saturday, July 25, felt giddy and took a blue pill. On Sunday, languid, and no appetite, pains of head and limbs; took a small basin of mutton broth. At one A.M., Monday morning, retching and purging; violent cramps of feet, legs, and inside of thighs came on; griping pains in back and bowels; violent pains across the chest and back, and difficulty of breathing; "dreadfully irritable heat of body, legs, and arms"; "feet very cold at onset"; had some brandy and hot tea, which he immediately rejected; the purging and vomiting continued incessant at first, like "congealed blood, and very black." On Tuesday morning the evacuations became like gruel, and were passed every five minutes. I saw him on Tuesday for the first time; the first dose of the mixture checked the vomiting and cramps, and on return of cramps, the mixture relieved and stopped them. The character of stools changed at six o'clock on Wednesday and became black; urine not suppressed; took about eight pills and two bottles of mixture. Seen first by Dr. Doyle, who prescribed mixture and pills.

5. Charles Amer, aged forty-two, carpenter, residing temporarily in High-street; of spare habit and fair complexion. August 5. Three weeks ago, at Sydenham, was suddenly seized with pain across the loins while at work; was unable to walk, and, therefore, carried home by his fellow-workmen; diarrhœa, with sickness and griping pains of bowels, came on and increased daily. On the above date went to bed at six o'clock P.M.; had coughed and retched all day; nothing came up till ten P.M., when rice-water evacuations took place; constant cramps of legs and chest; severe pains in epigastrium; extremities sometimes hot and then cold; congested, dark hue; pulse small, feeble; voice whispering; felt sinking and scarcely able to articulate; urine suppressed for eight or ten days; attempted to go to water-closet, and was accidentally found by his friends on the ground, being unable to return to bed; mixture speedily gave relief, and from that time began to rally; took part of two bottles of mixture and eight or nine powders. The motions continued for twenty-four hours like rice-water, but dirty-looking, then ceased. Had no stool for several days; was able to get about a little on Friday, the 7th, but very feeble in joints, &c.; continued to improve, and returned home on Saturday to Sydenham.

6. Fanny Oliver, aged about thirty, 42, Cochrane-terrace; small, delicate woman; was delivered of a girl on July 5. On the 20th of July and two following days had griping pains in bowels, and felt very faint during the while. August 1, violent purging and sickness of dark, dirty fluid, sour and bitter; severe knotty cramps in bowels, "as if all [illegible]"; very cold and shivering at first, afterwards heat and cold alternating; the matter vomited became lighter like pale toast-water, and [illegible]; tingling sensation in fingers, the hands, feet, and legs, "as if asleep"; cold, chilly state, with profuse perspiration followed; "in a tremble," very faint when heat came on; "with an insufferable sense of sinking and dreadful thirst;" continually drinking cold water; appearance collapsed; pulse small; feeble motions every ten minutes, voice very weak, scarcely able to speak. Gave powders and mixture; "received great relief from mixture"; purging ceased after second powder; had no return of cramp after third dose of mixture. After attack, great weakness of limbs and joints; soreness of stomach, limbs, and small of back from cramps.

7. Mary Green, aged twenty-two, 30, Upper William-street; dark sallow complexion; under treatment for spinal irritation. August 4, had punching of bowels for some days; seized suddenly at four A.M. during sleep with cramp of stomach and calves of legs; "legs drawn double"; vomiting and purging dark watery fluid; general coldness, with shivering, followed by heat and profuse perspiration; skin became hot, with sense of burning; taste bitter; mixture relieved greatly and "settled stomach"; everything taken previously rejected; micturated freely, and is still annoyed by it. Took one mixture and four or six pills. On examining the evacuations, which were dark-coloured and brown, a gruelly, white sediment was found at the bottom of utensils, no gruel having been taken.

8. Elizabeth Milson, aged about forty, washer-woman, 9, John-street. August 10, pinching and griping pains in bowels from eight o'clock P.M. till twelve; sickness and increasing pain; purging and vomiting dark-green fluid; "cramps from toes to hips, and from fingers to shoulders," very severe; "draws toes double"; skin of extremities shrivelled and dark-coloured; shivering, followed by excessive heat and profuse perspiration. Aug. 11, has not micturated since seizure; pulse suppressed, very feeble, 88; feels sick when cramp comes on, but is relieved by mixture in less than five minutes; much thirst; tingling sensation in fingers and down arms; tongue brownish, furred; giddiness and buzzing sound in head. Aug. 12, very weak; passed a quiet night; cramps ceased; griping once this morning; stools watery, brown, throwing down a white gruelly sediment; pulse weak, 60; tingling continues; feels very sore in legs, hips, and from shoulders to fingers; expresses her satisfaction at relief derived from mixture; has had two bottles of mixture and ten pills; not all taken; convalescent.

10, Portland-terrace, Regent's-park,
August 12, 1846.

* The tingling sensations mentioned preceded the use of the mixture. They are said also to be an effect of the terchloride.—Vide *Medical Times*, Dec. 9, 1843.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

SECOND SERIES.

Reported by THOMAS FRANCIS PANSON, Esq., of St. George's Hospital

SURGICAL CASES.

CASE OF STRANGULATED FEMORAL HERNIA.

Hy. Phillips, aged nineteen, servant, of a spare habit of body, was admitted January 14, at 3, p.m., with a swelling in the right groin, which he said appeared the night before after a fit of coughing; he did not take much notice of it at first, as he said he had frequently had a lump come in the same situation after making any unusual exertion. But this time the appearance of the tumour was soon followed by pain at the part, and a dragging pain in the abdomen, with eructations and vomiting, first of the contents of the stomach, but latterly of stercoraceous matter. The tumour was circumscribed, resonant, about four inches round its base; its upper edge slightly overlapped Poupart's ligament, it was on the level with, and external to, the spine of the

pubes, and the spermatic cord was situated above it. It received an impulse on coughing, appearing to dilate and expand to the touch, and it did not disappear when the patient was in the horizontal posture. His bowels have not been opened for two days previously, and he is now labouring under a good deal of febrile excitement; the abdomen is tympanitic, but not tender on pressure.

He was placed in a warm bath for half an hour, when a considerable degree of faintness having been produced, the taxis was employed, at the same time bending the hip, and carrying the knee over the opposite thigh; gentle pressure was made downwards, and slightly backwards, but it failed in causing the swelling to disappear.

As it was now nearly twenty-four hours since its appearance, Mr. H. C. Johnson made an incision from the upper to the lower part of the swelling, dividing the integuments and superficial fascia, with a few superficial vessels; then the fascia propria, or sheath of the femoral vessels, and the cribriform fascia, when a very thin peritoneal sac was exposed; a portion of this was pinched up with forceps, divided with a knife, and a director being introduced, the opening was enlarged upwards and downwards little. A clear fluid escaped, and a portion of the small intestine, which appeared only slighly discoloured, was brought to view. The intestine was now held aside, and a director cautiously introduced to the edge of Gimbernat's ligament, with its grove turned inwards. Considerable difficulty was experienced at this part of the operation, owing to the tightness of the stricture. Sir A. Cooper's bistoury, which has only a limited cutting edge, was next passed along the groove of the director, and part of the fibres of Gimbernat's ligament were divided, slight pressure was then made on the intestine to empty it of its contents (fecal matter and air), and it was gently and gradually returned. The integuments were then brought together, and the patient was placed in bed.

9, p.m. He has had no more vomiting, and has no pain in the abdomen; pulse 100, hard.

Calomel, gr. vj., statim.; H. sennæ, ℥iss., magnes. sulph. ʒss., 6tis horis.

15th. Skin moist; pulse 94; but his bowels have not been open, and his tongue is rather furred.

Enema decoct. avenæ, Ol. ricini, ℥j., statim.

6. p.m. Bowels have not yet been open.

Cal. gr. vj., statim. Ol ricini ʒss., post horas duas.

16th. Bowels have been opened several times during the night, since which he has slept well. Tongue moist; skin cool; pulse quiet.

17th. Tongue clean; bowels open; no pain in abdomen, and the hand being pressed on it causes no pain. The wound appears to be healing by adhesion.

18th. Bowels open; tongue moist; no thirst; pulse 90, quiet; but there appears a slight redness, and puffiness round the wound, in consequence of which the adhesions were broken down and a little healthy pus escaped.

20th. Redness and puffiness have disappeared from the wound, there is a free healthy discharge from it; there is no tenderness around, nor any in the abdomen; but the patient has a red tongue and his bowels are constipated.

Haust. rhei., ℥iss statim.

22nd. Bowels open; tongue clean; a healthy discharge from wound, and no tenderness about it.

Beef-tea one pint.

27th. Wound granulating; bowels regular; pulse natural; appetite good; no thirst.

Beef-tea two pints. Mutton chop.

Feb. 3. A truss applied to-day.

5. Left the hospital.

Femoral hernia implies an escape of some of the contents of the abdomen through that part of the femoral ring, through which the absorbent vessels pass; this part being bounded externally by the septum of fascia dividing it from the femoral vein, internally by Gimbernat's ligament, anteriorly by Poupart's ligament, posteriorly by the os pubis. It is much more frequent in women than in men, both because the space between the femoral arch and the border of the pelvis is larger in them, and also because the structures which pass through it are smaller. But it may also happen in men, especially those of weak fibre, as in this instance.

The hernia having entered the femoral ring passes on through the tubular sheath formed anteriorly by the fascia transversalis, posteriorly by the fascia iliaca, and emerges through the saphenous opening of the fascia lata, turning up over its falciform process. It thus has for its coverings skin, superficial fascia, fascia propria, cribriform fascia and its peritoneal sac. The epigastric artery passes upward and inwards about half an inch from the external side of the neck of the sack. When the obturator artery is given off from this vessel, it also generally passes outside the neck of the sac, and in the female would be situated the round ligament, in the male the spermatic cord immediately above it.

The sac of a femoral hernia is seldom or never so large as that of an inguinal, but the portion of gut protruded is exceedingly tightly constricted, especially by the sharp, thin edge of Gimbernat's ligament, and hence strangulation is very apt to occur.

The symptoms of strangulation in this case soon began to shew themselves; they were first some pain at the part, with a severe dragging pain at the umbilicus, flatulent eructations; vomiting of the contents of the stomach, afterwards that of the intestines above the stricture. Sometimes a person may have stools, and yet all the symptoms of strangulation be present, but the stools which are voided are only the contents of the bowels below the stricture. The abdomen was distended from accumulation of flatus.

The not now been relieved, after a time the abdomen would have become more tense and tender; there would have been great anxiety, a pale countenance, hiccough, a wiry, rapid pulse, the pain would perhaps have ceased, and the patient have expressed himself as somewhat better; the tumour would then have decreased and become emphysematous, giving a diagnostic mark of the occurrence of gangrene, and death would soon have followed. Perhaps the abatement of pain and decrease of the tumour might have led an inexperienced surgeon to hope that the gut had been returned; but they are almost sure signs of the gangrenous mischief within.

The situation of the tumour immediately distinguished it from bubonocele, for Poupart's ligament was above its neck, and the spine of the pubes internally and on the same level with it, whereas, in bubonocele, Poupart's ligament is below, and also the spine of the pubes. In crural hernia, also, the abdominal ring is open, which is not the case in bubonocele.

Of course, the suddenness of the symptoms and the elastic feel of the tumour, at once distinguished it from enlarged gland, glands also are loose, if one should suppurate, there would be the want of impulse in coughing, which would be present in hernia. Had it been varix of the femoral vein, it would have disappeared on the horizontal posture being assumed, and would have reappeared on pressure being made at Poupart's ligament, which would have effectually prevented a femoral hernia from descending. Had it been psoas abscess there would have been fluctuation, and it might have disappeared in the horizontal position, and it would have come on gradually, or have been preceded by pain in the back and loins.

In the *treatment* all our endeavours must be to return the intestine into the abdomen, for there is no safety for the patient till then, therefore, the great rule by which we should be guided is, to waste as little time as possible in trying the effect of remedies which are uncertain in their operation; for it is a disease in which, if we do not get forward, we are almost sure to go backward; and when we consider that a single hour may be fatal to the patient, and that the operation, abstractedly considered, is very seldom fatal, the rule which is adopted at St. George's, viz., to operate directly one or two of the most likely remedies to succeed, have failed, appears to be one most likely to be attended with success. In fact, sometimes so many attempts to reduce the gut have been made before the patient arrives, that the operation is frequently proceeded with at once. The most efficient remedies are the taxis, with the warm bath, bleeding, and perhaps cold to the part. Sometimes clysters of tobacco, or its fumes, introduced into the rectum have been tried, but they are generally only a waste of time. The taxis, with the warm bath, had failed with this patient, and he was not a person to stand under bleeding; indeed we had had one proof of the inefficacy of faintness in the warm bath. In performing the taxis force must never be employed, but gentle and gradual pressure, with a kneading action of the fingers; force can never do good, and may do an immense deal of harm to the inflamed intestine; indeed, the intestine has been ruptured by the employment of too much force. Sometimes the taxis is inapplicable from the extreme sensitiveness of the patient.

On opening the sac a little clear fluid escaped, which was merely a little serous exhalation from the peritoneum, increased in quantity by inflammation.

Gimbernat's ligament is the preferable place to divide the stricture, for if we cut upwards the spermatic cord would be injured (in females the round ligament need not deter us), and if we cut upwards and outwards we should wound the epigastric artery. The bowel did not appear to have suffered much from the stricture; the part against Gimbernat's ligament was especially examined, as that is the most unyielding and sharpest part of the stricture. The intestine might have been dark coloured from impeded circulation; this differs from mortification, which arises from congestion and stagnation, and is of a dull ash, or slate colour, it is also soft, and the serous membrane easily peels off. If it be merely discoloured it may be returned, for when the stricture is removed, the local disturbance will cease. But if it be mortified it must not be returned, for the gas and fæces would escape into the peritoneal cavity, and would quickly cause a fatal result; but we must here make a free incision to procure the evacuation of the loaded canal above, and leave the wound open; nature will generally cast off the slouhs, and the wally of the gut will be approximated by adhesion, and continuity established generally without our aid; but a very rigorous diet must be preserved for a long time, that is, a diet which will nourish without causing distension of the bowels.

The great thing to guard against after the operation is peritonitis, which must be prevented if possible by procuring free evacuations from the bowels, giving saline medicines and a spare diet. Our patient required rather active treatment to procure evacuations; but he had not a single symptom of peritonitis.

The edges of the wound appear to have suppurated, and it was the confinement of matter which gave rise to the redness and puffiness about the wound, so, when a free exit was allowed, it soon disappeared. We must not set down the slight suppuration which occurred as suppuration of the hernial sac, for that is attended with the most violent symptoms, very much resembling, in fact, those of strangulation.

REVIEWS.

A Practical Manual of the Characters of the Blood and Secretions of the Human Body, &c. By J. W. Griffith, M.D. London: 1846.

A book, something like the one before us, is very much wanted in the present day. Discovery is all the rage; and whilst discoverers themselves are too much occupied in chasing new pursuits, to look after "game already won," we ought to be obliged in all earnest to their humble followers, who are satisfied with chronicling events and putting them in a tangible shape before us. In this light we look upon the Manual of Dr. Griffith. It aims at nothing novel, and in such

wise has some claims to our regard, for we are fond of unpretendingness.

The subject embraced by this monograph is one of great amplitude and consequence. It contains many vexed questions, both of ancient and modern date, and is not easily to be compressed by chemistry and pathology as at present extant. In good truth there is what we may call, in homely criticism, a vast deal of scientific nonsense, in all the learned nomenclature about nothing which antagonist chemists, microscopists, and physiologists are now a days making. We have seen many revolutions in these sciences, or rather amongst their votaries in our time. Not to go into years long gone by, whose memory, on the good old principle of "de mortuis nil nisi bonum," ought, of course, to be held sacred. We have plenty of proof in recent days of discovery. A pseudo chemist has started up with a wonderful notion of turning one element into another—a freak somewhat analogous to that of legitimately "setting the Thames on fire," and strangely enough he has found dupes willing to sanction him, until a little rigid questioning and repetition of his processes has proved the soi-disant discoverer to be nothing better than a scientific black-leg. Microscopists we know are continually at war with one another about things visible and invisible, and now and then seem in a fair way to realize the fable of the Kilkenny cats, by worrying in mutual earnest until there is nothing left to fight with. Physiologists are proverbially at daggers drawn about precedent, priority, and such like; there is so much of the sauve qui peut, or "deil tak the hindmost," as is far from palatable to such as are not lovers of literary pugnacity.

It is for these things that caution and reserve are indispensable for the right reception of novel scientific announcements. Something like proof should accompany discovery ere it be implicitly believed. At the same time, when new facts are put before us with anything like an air of probability or proof, they ought instantly to be made current capital of those who make it their business to gather and distribute knowledge. In this respect the author of the book before us is not quite up to the mark. Many of its contents do the compiler much credit for industry, and judgment in selection, but many others are far in the rear of modern discovery. The article on pus, and the means of its detection in the blood is very incomplete; and in distinguishing between pus globules and colourless blood corpuscules, he forgets to mention their relative shapes. The chemical characteristics of lymph he takes from Gmelin. We are surprised that Dr. Griffith should have overlooked the more recent and accurate analyses of this fluid. The discourse on saliva and ptyaline is very old fashioned, and, according to the late investigations of chemists, altogether incorrect. In treating of fæces, Dr. Bird's observations on the green ones of children are quite overlooked. We could point to many other similar faults, which, like these, are quite inexcusable in a work professing to recapitulate the latest discoveries in chemistry and microscopy. No doubt the author has had very good intentions at heart in the compilation of his volume, and in some respects these intentions are answered. We hope, on next meeting with him, to find that he is less in the rear of advancing scientific knowledge.

A Series of Essays on Inflammation and its Varieties. By HENRY CLUTTERBUCK, M.D. 8vo. Lond., 1846. Pp. 67.

The announcement of a work on inflammation from the pen of a physician like Dr. Clutterbuck, already well known for his original and sound pathological and practical views on this subject, will be hailed with every satisfaction by the generality of the profession. The discoveries which have been made in certain of the auxiliary branches of medicine since Dr. Clutterbuck last enlightened its members by his learned discourse on fever will give him further scope at the present time for the exposition of the comprehensive and obscure subject of inflammation. Ourselves rejoice most cordially at the appearance of the essay before us, the first of a series that will be required to complete the subject. To enter into an analysis of these as they appear singly, would be neither to do the justice to the theme nor to the writer that they severally merit. In commending, therefore, the unceasing [illegible] of the author, we must withhold minute notice of his work until it shall have been completed, when we will gladly enter into its critical consideration from beginning to end.

TO CORRESPONDENTS.

A Student *is perfectly right on the necessity of abolishing flogging in the army. It cannot be done too soon. It must be as affecting to the surgeons in attendance as cruel to the individual punished. But, between the colonel administrators of a system and the evils of the system itself, a wide distinction should be drawn.*

Marius, *who insists that a good medical directory would be quite as serviceable as a registration bill, and be much less of a job, should have written more legibly; we cannot decipher half the note.*

The advertisement "Friday Pulpy" is not fitted for our columns.

A Subscriber *can only get a correct answer from Messrs. Sherwood, Paternoster-row, the publishers of the work inquired after.*

Legalis *insists that the warrant for White's flogging being granted[illegible] was illegal and that consequently, the jury, in believing Wilson's evidence, should have had Colonel Whyte and Dr. Warren committed for murder.*

W. S. *is [illegible] concerning the medical directory advertised. We do not know the parties or their intentions. A directory for the country is much needed. The pledge given under false misrepresentation is [illegible], and should not be [illegible].*

M. D.—*We have neither time nor inclination to notice the Satirist's official defence of Mr. Erasmus Wilson.*

A. S., *we are assured, will find his capabilities [illegible] with on an early day.*

Mr. Hooper's *complaint of "Coroner's" injustice to medical witnesses is, unfortunately, now so common[illegible] a character that we might give up all our space to similar records. "Inquest reform" is becoming an urgent necessity of the day.*

A Subscriber *inquiring about baths will do well to consult our advertising pages.*

W. B.—*The examination questions were given correctly. Our correspondent will see that, although comprised in two days, there were four distinct examinations on four separate subjects.*

Mr. Alcock *should write to Messrs. Tyler and Co., Warwick lane, Paternoster row.*

Mr. Adill's *communication has been received.*

Mr. Hooper, *surgeon, of Brunswick street, Hackney-road, writes as follows:—"Observing a paragraph in your last [illegible] excellent journal of the 8th, [illegible] during the existence of Asiatic cholera in this metropolis, I beg respectfully to put you in possession of the fact, that four cases of that truly terrible disease have fallen lately under my care at [illegible], with the presence of every symptom I observed in that disorder in India, together with similar rapidity of course and fatality, [illegible] sufficient to constitute identity.* * * * * *My view [illegible] no so much to attract attention to the cases themselves as to bring a few facts relating to this immediate neighbourhood before the eyes of the proper authorities. I refer to the total want of drainage in Brunswick-street, and the continuation of it called Haggerstone—the consequently offensive and dangerous collections of stagnant water and filth, which render these spots the fruitful source of the most grave disorders. You would scarcely believe, without seeing it, that immediately in front of the large church, called St. Mary's, Haggerstone, to which a throng of respectable persons resort, there is a filthy pool from which emanate the foulest miasms, the pathway, totally neglected by the parish authorities, is frequently covered with water in bad weather. This pool, or gutter, extends nearly the whole length of the street, now a bustling thoroughfare, and would be a disgrace to the meanest country village. The garden of the house in which my last case occurred (all of them being in this line of street) is, from want of an outlet, overflowing with dirty water and the contents of a cesspool; such also is the case in most of the houses in this crowded locality, and here innumerable cases of bilious diarrhœa and dysentery have been, and are, constantly occurring."*

THE MEDICAL TIMES.

SATURDAY, AUGUST 22, 1846.

Perhaps after all, there is no better friend to Conservatism than your outrageous Radical Snob. When a man preaches to you that all noblemen are tyrants, that all clergymen are hypocrites and liars, that all capitalists are scoundrels banded together in an infamous conspiracy to deprive the people of their rights, he creates a wholesome revulsion of feeling in favour of the abused parties, and a sense of fair play leads the generous heart to take a side with the object of unjust oppression.

For instance, although I hate military flogging, as the most brutal and odious relic we have left of the wicked and torturing old times, and have a private opinion that soldiers of crack dragoon regiments are not of necessity the very wisest of human creatures; yet when I see QUACKLEY the coroner giving himself sham airs of patriotism, and attacking the men for the crime of the system—(of which system I are as much guilty as COLONEL WHYTE, unless we ill [illegible])—I find myself led over to the brow-beaten side, and inclined to take arms against QUACKLEY. Yesterday a fellow was bawling by my window on account of the trial at Hounslow, and "the hinfamous tyranny of british hofficers, and sawidge kurnel, hall to be ad for the small charge of won apny." *It is that fellow, a Radical patriot thank you, or a Radical snob, and which is it that he want to put down flogging or to get money?*—Punch (article, Snobs of England), Aug. 8.

THE "crowner's 'quest law" at Hounslow opens questions of deep and permanent concern to the whole medical profession. The outrages it presents on the rights and privileges of medical witnesses, gross as they are, appear before the public in so authorized a shape, coming from a *medical* coroner, that, unless strongly denounced and repudiated, they will serve as precedents of as wide application as they are of fearful injustice.

Let us just look at Dr. Warren's treatment. From the very commencement of the inquest he was an accused man. If there were any grounds for the coroner's investigation *he* had improperly allowed White to be over-flogged, or had ill attended him afterwards. Even to moot the inquiry was to bring *his* professional character under suspicion. To do him this severity, where was the pretence? The man had died weeks after the flogging: the minutes of a post-mortem examination, conducted by two other surgeons, were before the coroner, and gave conclusive evidence of a sufficient cause of death. Why, then, should the injurious presumption be wantonly raised that Dr. Warren, though his practice was supported by the autopsies, and might be by the deliberate testimony on oath, of two other surgeons, had been guilty of some possible enormity of professional conduct? If every coroner thus dealt with medical attendants, we should have but a succession of inquests on the judiciousness of their practice. Thus, then, instead of holding every man innocent until proved guilty, this medical coroner adopts as his maxim the holding of every medical man guilty until proved innocent. But the wrong does not end here. Before letting Dr. Warren go unaccused and unsuspected even on the sworn testimony of two unimpeachable medical

witnesses, he determines to try what two other medical witnesses may say. Accordingly Messrs. Day and M'Kinlay, by his own appointment, examine the body; but, odd to say, they prove the needlessness of the implied imputation, for they join with the other two surgeons in their opinions, and unite in acquitting Dr. Warren!

Dr. Warren is thus not only proved not guilty—he is not only actually proved innocent by two surgeons, who publish the grounds of their convictions—but "Coroner Quackley's" own two surgeons reiterate the examination, and also prove his innocence. Yet mark the result. Though thus triumphantly done justice to, the *medical* coroner is not satisfied that a worthy medical brother has not committed crime, and selects his own servant and close friend to give him an inculpation if it be possible. The inculpation *is* given; and on the convenient evidence of that one person—four witnesses to one against him—the coroner does his best to secure a brother doctor's conviction by the jury and public, of brutal and murderous neglect of a human being confided to his professional care!

What then, as thus evidenced, is the principle of action of this medical coroner with medical men? Just this. When the charge is horrible brutality by a professional brother possessing a character of unimpeached rectitude and humanity, "Coroner Quackley" will sooner believe one man inculpating than four proving innocence! Nay, when innocence is established by four testimonies, he will go on with the investigation on the mere chance of picking up, among his own acquaintance if necessary, a witness who, whatever his evidence, starts with the disadvantage of having four to one against his accuracy!

This curious piece of "crowner's 'quest law," which will not acquit on four testimonies, but will convict on *one*, suggests one query *en passant*. If Dr. Warren's word alone was not enough—if the testimony of Drs. Reid and Hall was not enough added to it—if, in further addition to that, it was not enough when the testimony of Messrs. Day and M'Kinlay was joined—how happens it that the medical coroner no sooner gets the testimony of Mr. Wilson on the other side—isolated, unsupported, and directly contradicted—than he declares it to suffice of itself? Five medical men consecutively coming to one opinion, and opposed by no single evidence, are not to be believed without further investigation; but one man, even opposed to five, is quite satisfactory: nothing further is asked or required! Character, liberty, life, may depend on a jury's acceptance of this isolated and contradicted opinion: it was criminatory to the highest extent; it was opposed to four disinterested opinions perfectly exculpatory; yet the medical coroner, adopting it himself and exerting himself to get it adopted, did nothing to see whether any other medical men could, would, or should support it!

An act of this kind prepares us for some extraordinary things under the head of its *accessaries*:—

1. The self-sufficing witness has to examine the exhumed body twelve days dead; and, that he may be embarrassed by no awkward questions, or still more awkward proofs, as to what he did see in the decomposed subject, the *accused* doctor is strictly prohibited from being present, or having any person on his part present. Having an odd position to sustain, a droll case to prove, and a hard battle to fight—so many medical witnesses against him—it was *probably necessary* that Mr. Wilson should be *aided*, if not by any other witness's testimony, with the useful but rather anomalous privilege of registering the evidence given, or supposed to be given, by the dead body, under the observation of no criticising eye. It left the accused at his mercy. Nothing could be fairer.

2. The jury have it carefully concealed from them that the anti-doctor witness is an ex-servant and useful private friend of the coroner. The magistrate maintains with him the most distant courtesy; and extracts from his diffident modesty the whole *rigmarole* of his certificates, diplomas, and books, as if it were news of some just-discovered continent. If one medical witness accusing a medical man *was* to be believed in preference to four witnesses exculpating him, it would, of course, not do to tell the jury that the four witnesses were independent men, and the one witness the coroner's hanger-on; or that, as a medical witness could aid a medical coroner in getting up an electoral sensation, a medical coroner could help a medical witness in turn to get his name before the public. The more real and the less avowed connection between the two, of course, the better; and, against such fearful odds of evidence, it was at least politic to eke out the lion's skin with that of the fox.

3. Mr. Wilson, having drawn up a report of the third autopsy in concurrence with the disappointing Mr. Day—a medical man actually selected by the coroner, and the only other one present—discovering that the unpliable Mr. Day did not go with him—found it convenient, therefore, to drop the joint statement, and to give in evidence a written report, subsequently concocted, which Mr. Day never saw before, and which, when he did see, he indignantly repudiated! Standing alone in the accusation of a medical brother against four opposing testimonies, Mr. Wilson had a difficult position, and was, of course, not to be restricted by a *medical* coroner to ordinary weapons.

4. Mr. Wilson's evidence, as we showed last week, was not only false in scientific fact, but incoherent and absurd in every aspect—one monstrous figment of the brain based on another, till we had a very Babel of anatomical nonsense and gibberish. For a medical coroner to have told the jury that, unsupported and alone, this kind of science did not form the strongest possible ground for believing that a virtual manslaughter had been committed by a medical brother, would have been very hard on Mr. Wilson, and might have prevented his "discoveries" bearing the bell over the sober realities of his four opposing brethren.

5. Dr. Hall, in making his statement in conflict with Mr. Wilson's, is so rudely and frequently interrupted by the coroner that he is obliged to break off in the middle. One against four was entitled to a small advantage of this kind. How else could he hold ground?

Finally. "The medical men were ordered to leave the room, and each was called in separately"—Mr. Wilson, of course, having the ear of the jury last. It was desirable to this medical coroner that the public should see that medical men could not be trusted for an honest opinion in the most solemn case if they were not, like the lower kind of Newgate witnesses, examined in the absence of each other. *O Rare Medical Coroner!*

With such facts before us, is it to be wondered at that Mr. Fox Maule declares officially that the investigation cannot be left where it is, or that medical men from all parts of the country should be addressing us in such language as the following?—

"CORONER'S TORTURE.

"Sir,—In my last letter I emphatically protested against coroners employing their own surgeons at inquests, especially in cases where the coroner and surgeon are associated together in writing in the same journal and enforcing the same political views.

"The coroner's court is held by all true Englishmen as one of the most important safeguards which the people possess. No person can meet with violent death without inquiry; and in any case where doubt exists in the minds of the relations of a deceased person there is no difficulty in obtaining a thorough investigation.

"He, then, that would violate the rights of the coroner's court is an enemy to the people, and a destroyer of the rights and best defences of the subject.

"Such is the general feeling upon this point, that there is hardly an instance upon record where the powers of the coroner have been abused, or where the noble privileges of the court have been prostituted to selfish, political, or party purposes.

"However, a case has lately occurred where a coroner with known political bias has presided over an inquest, and has given strong reason for believing that he did not inquire into the cause of death, but procured a verdict preconceived and predetermined before one tittle of evidence had been adduced. In this inquest the coroner began his mock inquiry, but, to his chagrin, the evidence of one skilful surgeon after another was directly contrary to his intended verdict, and would have upset the political movement that he had in prospective. Upon this he obtains the evidence of his man Wilson, and he takes his statement in preference to that of other distinguished members of the medical profession.

"It is clear that here inquiry ended and dictation began—that here the right of the coroner's court was violated, and that it was prostituted to enforce his own peculiar views.

"The cunning means used to assist him in his course also show the nature of this foul affair; for his continual and extended adjournments caused much public excitement, which subsequently he has taken advantage of to afford him a subject to talk in Parliament, and delude the old ladies of Exeter-hall.

"Whatever may be the opinion of flogging—whatever may be thought of the end attained—there can be no question that no one can justify a perversion of the objects of the coroner's court for any purpose whatever; and, if it has been perverted, the delinquent should be at once called to account for his transgression.

"The object attained by the means employed was to hold to the public scorn of weak-minded people some of our most gallant officers and our distinguished medical authorities. In this way the coroner has acted as a tyrant, and inflicted his illegal torture upon honest and virtuous men.

"Against this tyranny, and against this torture, I enter my solemn protest; and I call upon the public to protect themselves from a repetition of

the freaks of this demagogue, and preserve inviolate the rights of the coroner's court.

I am, your obedient servant.

A Constant Reader.

STATE OF THE PUBLIC HEALTH IN THE SPRING QUARTER, 1846.

The last report of the Registrar-General shows a considerable increase, for two or three months past, of disease and death. In the spring quarter, ending June 30th, 43,582 deaths were registered; being greater, numerically, by 2,853 than those in the corresponding quarter of 1845, and by 4,731 than those in the same quarter of 1844. During the spring quarters of the eight years preceding the present, there has been an obvious diminution in the rate of mortality, especially in from 1841 to 1845; in the quarter last past, however, there has been a striking reverse.

It would seem that circumstances perfectly controllable and capable of amendment have been mainly instrumental in promoting the ravages in question. "Within the last three months," says the Registrar, "*ten thousand* lives have been destroyed in a part only of England by causes which there is every reason to believe may be removed." Certain places in Lancashire and Yorkshire appear to have been the chief sufferers. Liverpool, Sheffield, and other towns in the north, have been visited by epidemics of almost unequalled fatality; and the diseases, proportionately to the population, were fully one third more numerous than in London.

The great increase of mortality in the past quarter has been chiefly owing to the prevalence of zymotic diseases—those of the sporadic class have scarcely been more numerous or fatal than usual. Diarrhœa and dysentery have been for the most part in the ascendant, and have made havoc without mercy. In some places their ravages have been excessively severe. Generally speaking, simple vomiting and purging have been the leading symptoms. The vomited matter has usually had a bilious tinge, occasionally or constantly—sometimes yellow, and more rarely green. In some cases, a distressing retching has continued long after the contents of the stomach have been expelled, at last running into severe spasm, and producing excessive pain and anxiety; in other cases, a troublesome nausea, without vomiting, has lasted for days. The evacuations, *per anum*, have mostly been frothy, and of a light yellow, like barm. In some instances they have been dark green, or black, from depravity of bile; and, again, almost colourless from the want of it. Ourselves have known the dejections to be of the rice-water kind of genuine cholera, without, at the same time, having any reason to suspect the ailment to be other than common bowel complaint. The amount and frequency of the purging have occasionally been excessive. In several cases that have come under our care, the patients, for hours together, have scarcely been able to leave the night-chair without being obliged directly to return to it. A natural consequence of this abdominal pain, tending downwards, and constrained position, has been tenesmus of the severest kind, piles, and hemorrhage *per anum*. Cramps and spasms of terrible intensity have been the occasional concomitants of this gastro-intestinal irritation. We have seen the convulsive spasms of the extremities, and fixed contraction of the abdominal muscles, equally severe of late with the like symptoms in cases of pure cholera. At the time this fatal disease prevailed in this country, it was an idle notion with many of the profession that cramps and spasms were peculiarly pathognomonic of it; forgetful that these are very common indications of intestinal irritation, however originating, and that the direst forms of cholera are unaccompanied by muscular pains of any kind.

The probable causes of the epidemic in question are several. There are some people who, however well advised, can never profit by instruction. They are always at contraries with nature, and doing it voluntary outrage whenever they can. These are chiefly such as can put no restraint upon their appetites, and are little particular about the materials that indulge them. It can be no wonder, then, when the weather is excessively hot, and the oxygenation of the blood by respiration correspondently slow, that substances, gross and indigestible, should offend people's stomachs; give their livers extra work, and disorder them into the bargain; and put the whole system in a state of commotion. Cucumbers, cold salad, peas, young potatoes, pickled salmon, ices, and gourmands best know what besides, are the gastronomical perquisites of this season of the year; and it can be no wonder that their inordinate indulgence is followed by some bodily penalty or other. Very many cases of bowel complaint, as it has lately prevailed amongst us, have been owing to the indiscriminate and redundant use of food. In our own experience, some of the severest cases of the ailment have been due to gluttony. Substantial beef and mutton, and stale bread, and such like things, people are not generally in the habit of taking to excess; when these are eaten, the appetite usually stops short of mischief. The case, however, is different with the edible items above specified. People seem to think that they must be eaten extravagantly, or not at all. Hence, the rule of their ingestion is the converse of what it ought to be—they are swallowed with a generous *gusto*, until the last mouthful pauses in its progress, which is considered the only genuine *sine quâ non* to a cessation of mandible hostilities. The reverse of indulgence like this is the decency that should be observed, at least in tropical weather.

Another cause of the epidemic in question is the intolerable heat we had some time past. It was next to impossible that a scorching temperature like that could be endured with impunity. There was comparatively little ailment at the period of its prevalence: but, as is usually the case in climates naturally temperate, its cessation is the opportunity for the advent of its *sequelæ*, in the form of visceral congestion and derangement, in very threatening states.

A third cause, and perhaps the most influential of the zymotic diseases of the season, is impure air. To breathe a free, healthy atmosphere, is a cardinal point in the maintenance of health and strength. To lack this advantage, is to encourage the accession, and favour the progress, of disease. That this is the fact, the statistics of mortality abundantly prove. Where there is imperfect ventilation, as especially is the case in crowded and confined districts, together with inefficient drainage and sewerage, it must necessarily happen that the neighbouring inhabitants become unhealthy. This will be particularly the case in hot, humid weather. Not only is the constitution less able, under such circumstances, to resist the influence of noxious effluvia, but these, being emitted in unusual abundance, taint the atmosphere proportionately, and in the same ratio predispose to, or actually excite, disease. This fearful but unheeded truth has lately added to its many previous manifestations. The Registrar says:—"In the metropolis, the deaths at the close of June from diarrhœa, dysentery, and common cholera, rose to forty weekly, and have since increased. Nor is it to be wondered at. Notwithstanding the improvements effected when cholera was last epidemic, the foul untrapped sewers, and the ground areas of the best streets, emit noisome smells and volatile poisons, which are as fatal as arsenic to a certain number of persons. London is surrounded, too, by stagnant putrid ditches, as some cities are by walls. It would be well not to wait carelessly until cholera reaches the country; but to look before, remove these nuisances, and purify the reeking atmosphere which gives to the disease breath, life, and being." In another part he says, "The inadequate supplies of water by companies, the imperfect sewerage in towns, the open drains and ditches, and the general neglect of cleanliness, leave everywhere great quantities of organic matter to decay and putrify in the midst of crowded populations. In such circumstances the mortality, like putrefaction, is always increased when the temperature is high, and epidemics of diarrhœa, dysentery, and cholera prevail."

We trust that the time is near when judicious, practical, benevolent observations like these will fasten themselves upon the minds of the community, and dispose their hearts to duly regard, and their persons duly to enjoy, the beneficial effects of fresh air and cleanliness. With various local authorities, no doubt, much fault rests for not providing against accumulation of filth, stagnation of waters, and so on; and we trust shortly to see some wise enactment which will comprehend a right estimate of the physical condition of the people, and the means best calculated for protecting and providing for it. At the same time much rests with the people themselves—soap is not very costly, and water can generally be had for nothing: and yet the majority of the poor will not be at the trouble of keeping themselves clean. All we can do is to tell them the dangerous consequences of filthiness, and leave it to their personal discretion to provide for their personal safety.

Hooping-cough, we perceive, has been very prevalent during the past quarter. Not only

have the cases been unusually numerous, but fatal also, as the returns testify.

In several districts there has been remarked the great disproportion of deaths in infants under a year old. This is imputed, and we fear too correctly, to the baneful use of Godfrey's cordial and other narcotics, which are administered to the little victims to send them to sleep and save the trouble of nursing.

Smallpox, of course, has taken its due place in the list of "ills that flesh is heir to." And so may it be expected to do until the prejudices of the people are turned away from vaccination. It is really a mystery that the accumulated evidence of years has not yet sufficed to dispel the foolish infatuation of the mass concerning the loathsome disease and its antidote. We find, on looking over the returns, that in some places smallpox has been extensively fatal; and, as usual, the great majority of the sufferers have been unvaccinated. If ignorant, deluded people will persist in refusing a remedy so innocent and efficacious, it is fitting that, for the safety of the public in general, Government should authorize certain means for the enforcement of the sanatory rule of vaccination.

THE NEW REGISTRATION BILL.

This plagiarism on Sir James Graham's bill offers as good a specimen of legislative audacity as it has ever been our fortune to witness.

There is not one clause in it not pillaged.

There is not one clause in it that has not been vulgarly vituperated by the very man that now adopts it.

Thus unscrupulously got up, it is not less unscrupulously laid before the public.

There never was a bill so surreptitiously introduced into Parliament, or so surreptitiously tried to get passed through it.

It has never been submitted to the opinion of the profession, and at this period of the session *cannot* have the consideration it requires.

There is, finally, not in Parliament a man in whose hands the profession would less soon see a bill that concerns their interests.

The profession should immediately set their face against this extraordinary piece of legislative dishonesty.

If the bill be good it should have been introduced with professional sanction, and have been duly placed before Parliament in fitting season.

If the bill be bad, as the hands it has fallen to suggest, the surreptitious mode of smuggling it through Parliament implies, and as all crude attempts to do great things by halves must be, the stronger we oppose it the better.

Not a moment is to be lost in petitioning Parliament against the daring plagiarism.

ROYAL COLLEGE OF CHEMISTRY.

Some very curious disclosures are expected to take place at the general meeting of subscribers to this institution, to be held on Monday, the 31st of August. It appears that Dr. Gardner, the Secretary, has procured his name to be inserted as lessee of the premises, used as the college, without the knowledge or sanction of the committee; and that a disclosure of this fact, with other circumstances, having led to his suspension as secretary, he has made the bold though unsuccessful attempt of holding the premises, *vi et armis*, against the admission of the committee. Some odd scenes of door-breaking have already taken place; but, from the zealous and determined manner in which the committee have taken their post, there is no doubt as to the result of the squabble itself, and little apprehension entertained of its permanently interfering with the interests of this valuable institution.

DR. BOSTOCK, F.R.S.

Among the deaths recorded in our last week's obituary will be found that of Dr. John Bostock, F.R.S., &c., whose name has been long and prominently associated with the progress of medical and general science. He was a native of Liverpool, and the only child of Dr. Bostock, who, after a bright but brief career of practice in that town, was cut off at an early age in 1774. The subject of the present notice was born in 1773. Under the immediate tuition of Dr. Priestly, Dr. Black, Dr. Monro, and Dr. Hope, he became imbued with an enthusiastic love of science, more especially as connected with physiology and the practice of medicine.

Having graduated at Edinburgh in 1794, he settled in his native town, and there became distinguished by a successful practice, and an active encouragement of the local charities and literary institutions. He removed to London in 1817, when he finally renounced the practice of physic, influenced by the greater facilities afforded by the metropolis for the pursuit of his favourite study and the enjoyment of the society of his scientific friends. To those already mentioned he was now able to add the illustrious names of Day, Wollaston, and Young. Prior to this period he had contributed many important articles to "Brewster's Encyclopædia," and to most of the leading literary and scientific journals. He now proceeded to publish his "Elementary System of Physiology," a work of the greatest interest and importance, and the first connected view of the subject that had been put forward in this country, the third and last edition of which was published in 1836. He afterwards wrote a History of Medicine, which forms part of the introduction to the "Cyclopædia of Practical Medicine." His other writings are most numerous. But it is not possible in a brief memoir to enumerate even the titles of all his separate publications, or of those contributed by him to the cyclopædias and journals of London and Edinburgh.

Since his residence in London he has been associated with most of the scientific societies, and has taken an active share in the management of many of them. He was president of the Geological Society in 1826, vice-president of the Royal Society in 1832, and has been several times on the councils of the Linnean, Zoological, Horticultural, and Medico-Chirurgical Societies, and of the Royal Society of Literature. He may be said to have held a prominent position among those who, in our day, united their energies in the advancement of medical and physical science.

In private life no man was more respected or beloved. He was equally ready to impart the overflowings of his sensitive and affectionate heart, and the varied stores of knowledge with which his intelligent mind abounded.

Honours to the Profession in France.—Surgeon-major Dr. Maher, agrégé of the faculty of Strasburg, formerly professor at the hospital of instruction of that town, and at present chief surgeon to the military hospital of the Saltpetrière at Algiers, has just been appointed Knight of the Legion of Honour by the French Minister of Public Instruction.

MISCELLANEOUS CORRESPONDENCE.

THE "NATIONAL INSTITUTE" OF ENGLAND AND "THE MEDICAL CLUB OF FRANCE."

[To the Editor of the Medical Times.]

Sir,—All those who have convinced themselves that the cause of the general practitioners of this country is in their own hands, and that a firm union is the only means by which they can render it triumphant, must rejoice at the prosperous commencement which has been made in the foundation of a voluntary National Institute. The excellent spirit in which the design has been conceived, carried on, and received, can leave no doubt as to ultimate, and not distant, success. Of course the numbers who have joined it (although quite as great as the most sanguine could have expected, when we consider the difficulty there always is in setting any institution on foot which calls for repeated payments, and the disappointments which have attended so many other ill-contrived and worse-executed attempts), and the funds at the disposal of this body, are at present too limited to admit of much being done as yet; and the object of this note is to suggest to the managers what I think very desirable as a commencement.

The position of the medical reformers of France and of our own country is just now singularly alike. Last year, as your readers are aware, a large congress met in Paris to discuss their grievances and to devise suitable remedies. I have perused all the speeches which were delivered on that occasion, as well as numerous other documents relating to the subject, and I quite agree with a writer in the "Medico-Chirurgical Review" of January, that the practical evils which the medical profession labours under in France are much greater than those which afflict it in our own country. I have only to do, however, with the attempt made for remedying them. Just as in our own country, the Government at first showed itself disposed to afford the requisite redress, and declared its intention of proposing or sanctioning a legislative measure forthwith. Business of a more exciting and, to legislators, of a more profitable character was, however, allowed to engross all the session; and this, together with the opposition offered by the constituted medical bodies interested in preventing the desired changes, has determined the postponing of the introduction of any measure ***sine die.***

The profession in both countries, being thus thrown upon its own resources, has resolved upon a similar course in either, viz., the maintenance of a firm union as a basis for future operations. The leading men in the French movement have determined to this end, among other means, upon the establishment at Paris of a "Medical Club of France for the protection of the interests of science, the dignity of our art, and especially for rendering closer the ties of medical co-fraternity." Rooms are to be taken and maintained by an annual subscription of 20 francs; and to these members are to have free access from morning to midnight, under such regulations as may be devised by an elective council.

This seems to me an admirable mode for bringing practitioners more together, and thus acquainting them with their true interests, and removing that feeling of jealousy and ill-will which only exists in consequence of such non-intercommunication. For the purpose of enabling their members thus to associate with each other on terms of entire equality, I would then suggest, that the first operation of the committee of management of the Institute should be the hiring a large room or rooms in a central part of London, and the furnishing it with the medical periodicals and other appliances of the like kind. Opened during the day and the evening, it would form a place of agreeable and useful resort, it would form, also, a convenient hall for the holding meetings, which should be very frequent, whether for business, the advancement of medical science, or the purposes of recreation; and on the premises all the executive business of the council and secretary might be transacted. Whether any portion of the other advantages usually understood to be afforded by clubs, as regards eating and

drinking, might be realised, is doubtful; but, at all events, those of the useful and inexpensive character I have alluded to are at once attainable; and I feel certain that, were such a place of resort or "home" for the practitioner to be opened, great numbers would at once avail themselves of them.

Seeing that the Institute intends demanding the same subscription from country as from town members, it might seem unjust to devote the funds to objects which will be chiefly beneficial to the latter. I believe, however, that this will be found a means of adding very materially to the funds of the Institution, and yet very little augmenting its expenses. Moreover, less than a guinea subscription could not well be asked; and our country brethren are much better able to pay this than we poor fellows of the metropolis, upon whom, nevertheless, nearly all the work of the Institute must necessarily fall. Thanks, also, to the railways, we shall see our country brethren much more frequently in town than heretofore; and the advantages which such an establishment is likely to confer upon even the casual visitor are worth his consideration.

The council of the new Institute will have a difficult task to perform, and suggestions will flow in upon them from all quarters. I quite appreciate the desirableness of the numerous important objects which have already been stated as being those the Institute should contemplate. But we must not attempt too much or too many things until our position is more assured, and our exchequer more flourishing; but, as a measure preliminary to others more important, I venture to think the establishment I have alluded to is worthy the attention of those who have the management of matters in their hands. J.

INFLUENCE OF SPIRITUOUS DRINKS ON CUTANEOUS DISEASES.

[To the Editor of the Medical Times.]

RESPECTED FRIEND,—Permit me, through the valuable pages of the Times, to express my obligation to James Startin, Esq., for supplying the cases in support of his views of the relation that subsists between the disease, acne, and abstinence from alcoholic drinks.

These cases, indeed, do "speak for themselves," and to me their language is somewhat fearful. But I cannot admit that they prove any of the three propositions with which we set out, viz. 1st, That cases of acne had multiplied since the introduction of teetotalism. 2d, That this increase is attributable to the practice of total abstinence from alcoholic drinks. 3d, That disorder of the digestive system is a common consequence of such abstinence.

The cases do not prove an increase in the frequency of the complaint, because we have no other numbers with which to compare them. Is it not possible that the London Cutaneous Institution and J. Startin's own celebrity may have, of late years, drawn together a greater number of cases than had previously been presented to his notice in a given time, without actual increase in the community at large? But, admitting this increase to be a fact, the cases reported afford no proof of total abstinence from alcohol being the predisposing cause, as we are not furnished with evidence to show that the patients, during the period of their abstinence from alcohol, were properly fed, and that their general habits were conducive to health. For the same reasons, the cases afford no proof that disorder of the digestive system is a consequence of abstinence, whether sudden or gradual. Besides this, I see no reason in these cases to attribute recovery, in a single instance, to the use of alcoholic beverage. What! did hot-air baths, sulphur fumigations, chalybeates, mineral acids, vegetable bitters, iodine, and mild nutritious diet contribute nothing towards correcting and energising the digestive functions, increasing the cutaneous circulation, and determining blood to the surface? Or, could they not entirely fulfil these indications without the adjuvancy of that most vulgar and apparently most seductive tipple, gin and water?

The idea of assisting an ill-used, jaded stomach by administering gin and water reminds me of a woman in Edinburgh who was seen attempting to give some gruel to a weakly baby. The child did not seem to like it, and would not take it. "Ah," said the mother, "*you know what you want*," and, reaching down a bottle, poured fully half a wine-glassful of whisky into the child's food. The effect was stated to be extraordinary. As soon as the child was sensible of the presence of the stimulus it gobbled up the food with astonishing eagerness. Yes, the poor little stomach was "apt to neglect its office," and its mother, like many higher authorities, entertained exalted notions of the efficacy of alcoholic stimulation. She would begin, no doubt, prudently, with less than half a wineglassful, and the effect encouraged her to proceed, properly proportioning the dose according to the increasing infirmities and growing alcoholic appetite of the child. I can perceive no difference between this instance and those before us, but in the greater grossness of the infantine case. The principle is the same. Yet what would be thought of its being brought forward as an illustration of the text "take a little wine for thy stomach's sake!" That alcoholic liquors, both fermented and distilled, may be sometimes useful in the treatment of disease, I entertain no doubt. I believe that almost every substance possessing active principles may be used medicinally. My objection is to their routine employment, where equally good results could be secured by less objectionable means; and to the encouragement of an idea that alcohol, as a beverage, is one of the necessaries of life.

I am, very respectfully,
JOHN FOTHERGILL.

Darlington, 8th Month, 11th, 1846.

N.B.—My last letter was, by mistake, dated 2d Month, instead of 7th Month, 28th.

CALUMNIES ON THE WESTMINSTER HOSPITAL LECTURERS.

[To the Editor of the Medical Times.]

SIR,—A paragraph appeared in the *Lancet* of last week, stating that the annual distribution of prizes had been withheld at this school. On behalf of the lecturers and myself, I desire most emphatically to deny the truth of this statement; and we beg of you to publish our contradiction of the false assertion. The following books and instruments were awarded as prizes—Andral's Clinical Medicine; Watson's Lectures; Fresinius' Qualitative Analysis; Bell on the Nerves; Burnett's Botany; Hooker's British Flora; A Case of Obstetrical Instruments, &c.; Geological and Mineralogical Case for Blowpipe Analysis; together with an extra prize given by Dr. F. Bird and myself to the second candidate in botany. These prizes were distributed among the following gentlemen—Mr. Collins, Mr. Mullins, Mr. Tapson, Mr. Wales, Mr. Price. In two classes the answers of candidates were not deemed by the examiners of sufficient merit to deserve a prize.

The lecturers would not have considered it necessary to make this statement public, but that a series of articles have from time to time appeared in the *Lancet*, based on false information communicated to the editor, not intended to correct or criticise any real neglect or abuse in the school, but mainly calculated to bring into discredit those who possess the confidence and esteem of the students. By this contradiction we leave the profession to judge the motives and appreciate the animus of these unsubstantiated and malicious statements.

I have the honour to be, Sir,
Your obedient servant,
W. R. BASHAM,
Physician to the Hospital, and Hon. Sec. to the School.

Westminster Hospital, Aug. 18, 1846.

MEDICAL SCHOOLS OF THE UNITED STATES.—From the catalogue of these institutions which we have received, it appears that, during the past year, the number of students has been nearly 5,000, and that the degree of M.D. has been conferred upon 1,300.—*American Journal of Medical Sciences.*

UNIVERSITY OF LONDON.

M.B.—FIRST EXAMINATION.—EXAMINATION FOR HONOURS.—1846.

Thursday, August 13.—Morning, 10 to 1.

ANATOMY AND PHYSIOLOGY.—EXAMINERS, MR. KIERNAN AND PROFESSOR SHARPEY.—1. The head being divided by a vertical section in the median plane, and the dissection being commenced from the inside of the pharynx and fauces, and carried outwards to the integuments, you are required to describe in their order the parts that would be successively met with in so dissecting a space marked out as follows:—Above, by the zygoma, the body of the sphenoid and basilar process of the occipital bone—below, by the base of the inferior maxilla and great cornu of the os hyoides—behind, by the meatus auditorius, the mastoid process and the upper part of the sterno-mastoid and anterior vertebral muscles; and before, by the anterior border of the masseter and the tuberosity of the superior maxillary bone, so as to include the pterygo-maxillary fissure and posterior palatine canal.

Afternoon, 3 to 6.

1. Describe the parts situated in the plantar region of the foot (except the bones) in the order in which they present themselves on dissection.

2. Give an account of the several structures which enter into the formation of the skin, including a description of the glands, hairs, and nails.

Friday, August 14.—Morning, 10 to 1.

CHEMISTRY.—EXAMINER, PROF. BRANDE.—1. Explain and illustrate the methods of determining the specific gravities of solids, liquids, gases, and vapours.

2. Explain the construction and action of the common voltaic battery; the respective influence of the size and number of the plates; the circumstances which render its action inconstant, and the arrangements by which this inconstancy is prevented: state the causes which influence the direction of the electric current, and the changes which the different electrolytes suffer when the circuit is closed. Describe the theories of the electrolytic decomposition of aqueous solutions of sulphate of copper, and of nitrate of potassa.

3. Describe the external and the chemical characters of the varieties of urinary calculi; the composition and properties of their proximate components; and explain the chemical principles upon which the medical treatment of calculous disorders is founded.

4. What are the principal metallic substances constituting the granular ore of platinum? How are they respectively separated, and what are their characteristic properties?

Afternoon, 3 to 6.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.—EXAMINER, DR. PEREIRA.—1. How would you proceed to determine the purity of nitrate of silver, with especial reference to the suspected presence of the nitrates of potash, soda, lead, and copper?

2. Describe the different methods employed in commerce for making sal-ammoniac, and the mode of preparing *Hydrargyri Ammonio-chloridum*, Ph. Lond.; and explain the changes which occur during these processes, according to both the ammonium and amidogen hypotheses.

3. Give a botanical description of the fruits of *Alpinia Cardamomum, Momordica Elaterium*, and *Daucus Carota.*

4. Describe the musk-bag; stating its situation in the musk animal, its structure, and the supposed uses of its contents. State the class and order of the musk animal. Point out the characters by which genuine musk-pods are distinguished from spurious ones. Describe the chemical characters of pure grain musk, and the conclusions which have been drawn with respect to the nature of its odorous principle.

5. Describe the medicinal properties, uses, and doses of Assafœtida, Chloride of Barium, Colchicum, and Uva Ursi.

6. You are required to name,—
   α. The barks respectively labelled A, B, C, D, and E.
   β. The leaves and fruits marked F.
   γ. The fæcula labelled G.

[The use of a microscope will be supplied to those candidates who desire to avail themselves of its aid in answering this question.]

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

EXAMINATIONS FOR THE FELLOWSHIP.

August 4.

ANATOMY AND PHYSIOLOGY.—1. Describe the femur, and mention particularly its processes, the form of its articular surfaces, and the parts with which they are connected, the muscles inserted into it and arising from it, and the situations of these origins and insertions.

2. Describe the knee-joint.

3. Describe the mode of opening the abdomen in an examination after death; mention the regions into which the cavity is divided, and describe the situation of the viscera in those regions.

4. Describe the course of the common carotid artery, its relative position, and the parts covering it externally—the point of its bifurcation; the course and relative position of the external and internal carotid arteries and the branches of the former.

5. Describe the stomach; specifying its form, position, and component structures, also its blood-vessels and nerves.

6. Describe the urinary bladder of the male; its form, position, connection, and component tunics: also the male urethra, its course, dimensions, lining membrane, the parts surrounding it, and the openings into it.

August 6.

SURGERY AND PATHOLOGY.—1. What is the usual result of an incised or lacerated wound of the scalp, the cranium being at the same time denuded, so far as the bone is concerned? Is death of the bone a necessary consequence? and, if not, what treatment should be adopted, in order to prevent such death?

2. In what situations may ecchymosis occur from injuries of the head? May such ecchymosis be confounded with any other injury? and what is the proper treatment?

3. What are the various kinds of fracture of the skull, and in what situations are such injuries most dangerous? What are the symptoms and treatment of such cases?

4. What is the nature of concussion of the brain? What are the primary and what are the secondary symptoms? what injurious consequences of a more or less permanent character may ensue? and what treatment ought to be adopted under the several states of such injuries?

5. The seat of hydrocele and its various kinds; the symptoms and diagnosis of the complaint. Describe the palliative and the radical cure.

6. The symptoms of retention of urine from stricture; the modes of relieving the patients, either by the use of instruments or other means; the operation necessary when the natural course of the urine cannot be restored.

N.B. No junior candidates were examined on this occasion.

BRISTOL SUMMER ASSIZES.

August 17, 1846.

THE MASTER, WARDENS, AND SOCIETY OF APOTHECARIES OF THE CITY OF LONDON V. FRANK BARGEER WALL.

[*Before Mr. Justice Erle and a Special Jury.*]

Mr. Cockburn and Mr. Barstow appeared for the plaintiffs, and Mr. Stone for the defendant.

Mr. Barstow having opened the pleadings,

Mr. Cockburn proceeded to address the court and jury as follows:—May it please your Lordship, Gentlemen of the Jury, — This is an action brought by the Master, Wardens, and Society of Apothecaries, under an act of the 55th of George III., chapter 194, which makes it penal for any person to practise within this realm as an apothecary without having undergone an examination and obtained a certificate of qualification from the Society of Apothecaries. Gentlemen, this is a charge of very considerable importance with reference to the life and health of the subjects of this country. You can easily understand that, if an unlimited license were allowed to all persons, whether qualified or not, to practise as medical men, the consequences might be most fatal to the safety of her Majesty's subjects, and in this, as indeed in every other civilised country, a system, under some shape or modification, of medical police and regulation has been thought necessary for the protection of the public. Accordingly this act of Parliament was passed, establishing, or rather new-modelling and giving new powers to, the Society of Apothecaries, and intrusting them with the execution of this act, and the performance of the important duties which attach to them under its provisions. (The learned counsel having read the sections of the act which appoint a Court of Examiners and render it penal for any person to practise as an apothecary who has not undergone an examination and obtained a certificate of qualification, continued: — The act, therefore, makes these important provisions, that no person shall practise as an apothecary except he has undergone an examination and received a certificate from the Court of Examiners appointed by the Apothecaries' Society, and that if he does he shall forfeit a penalty of twenty pounds and the mode in which that penalty is to be recovered is by action at the suit of the Apothecaries' Society. They are the persons to whom the Legislature has by this act of Parliament intrusted the superintendence of the medical department which falls under the definition of the apothecary, and it is part of their duty to see its enactments enforced and carried out: it becomes, therefore, a part of their bounden duty, if they discover any person practising as an apothecary who has not received the certificate required by this act of Parliament and it is a sacred duty, because the safety of the public is involved in its discharge; it is a sacred duty which they have to perform to the public and the Legislature, which has intrusted them with these powers, to enforce the provisions of the act, and to insist on the penalties which it imposes if persons choose to infringe upon its provisions. This is not, therefore, the case of a common suit at the instance of an informer. The Society of Apothecaries have no private interests to serve, no private motives to gratify; they have simply a public duty to discharge, and it is in the discharge of that public duty that they have instituted the present proceedings. Now, gentlemen, the defendant in this case has, as I shall be enabled to show you, in various instances infringed the provisions of this act of Parliament: he has practised as an apothecary in the cases which my learned friend has brought under your notice in opening to you the pleadings in this case; he is here practising in this town, and to all intents and purposes carrying on his business, as if he had been examined and received his certificate from the Apothecaries' Society. Gentlemen, he has not done so; he has never submitted himself to the examination the act requires, and he is in possession of no certificate which justifies him in practising. These circumstances having been brought under the notice of the society, they have felt they had but one simple, straightforward course of duty to fulfil, namely, that of instituting these proceedings. I am not instructed to say a word against this gentleman's competency; he may be qualified, or he may not, I know nothing on the subject. If he be qualified, he has nothing to do but to submit himself to the examination, which, if he has the necessary qualification from education, he may readily undergo: and, if he has not that qualification, he certainly ought to be prohibited from practising, and he cannot in any way complain that these proceedings have been instituted against him. Gentlemen, I am therefore instructed to bring this case before you. I believe I shall have no difficulty whatever in substantiating the fact against the defendant with reference to all the instances I have mentioned. I do not know whether any difficulty will be attempted to be raised on the subject of what constitutes the practice of an apothecary: I am provided here with numerous authorities to show that the class of cases this gentleman has affected to treat, not being surgical cases but medical cases—diseases of the brain, the lungs, the heart, the stomach, and so on—fall within the province of the apothecary. There is not the slightest doubt, from the decision of the judges and the authority of the courts, that all these classes of cases come within the proper definition of practising as an apothecary; and anybody who practises in that capacity without a certificate renders himself amenable to a penalty.

Mr. Stone here interposed, and said: I take for granted you do not seek to recover more than one penalty in this case?

Mr. Cockburn: I do not know. What is it you propose to say?

Mr. Stone: That we cannot resist this action; and that the Apothecaries' Society have done nothing more than their duty in instituting these proceedings. Unfortunately this gentleman was not aware of the law which rendered it necessary for him to take out his certificate. He is a gentleman highly competent to practise; he has been practising as a physician in America; he served a regular apprenticeship in this city; he came back in November, 1844, and he certainly has been practising as an apothecary since that, at the times you have stated. I take it for granted the only object the Apothecaries' Society can have is to compel him to submit himself to the ordinary examination and to take out his certificate.

Mr. Cockburn: Certainly.

Mr. Stone: All I can say is, that he is a gentleman of high medical and surgical attainments. He has erred in mistake as to the law.

Mr. Cockburn: Let the gentleman be all my friend describes, that is the more abundant reason why he should conform to the law; if my friend says he does not wish to resist this action, I am satisfied to take one penalty, with this condition, that, as there are the costs on the other issues, it should be upon payment of the general costs of the action.

Mr. Stone: Of course.

The Jury, under the direction of the learned Judge, then returned a verdict for all the penalties in the declaration, amounting to £160, on the understanding that execution should issue only for one penalty and the general costs of the action.

GOSSIP OF THE WEEK.

STATE OF MEDICINE IN OCEANA.—We find in the *Revue Orientale* some interesting details on the state of medicine in the islands of Gambier (Archipelago of Mangareva, Oceana). These details were communicated by Dr. A. P. Lesson, physician-in-chief of the French forces in Oceana.

The Mangarevians have no medical men, properly so called, among them—every person acting as such and prescribing simples, or employing the prayers of the priests to their idols. In the Marquesas, and some others of the Oceanian archipelagos, the warriors are drawn from a separate class, who attribute to themselves the exclusive right of performing medical functions. At Mangareva it is not so: still, however, among the recent popular remedies here is one which is praised as a specific for dysentery, a very common and very fatal disease in the Gambier Islands, and which may be attributed to the abuse of the recent sugar-cane. The remedy consists in the bitter and astringent juice of a plant. They use, in the treatment of syphilis, the sudorific properties of a plant which appears to belong to the order Cyperaceæ. The itch, which they call *paka*, is by no means uncommon among them. Wounds (*maki*), pustules on the face, elephantiasis of the legs, cataract, opacities of the cornea, and squamous lepra, are the other affections to which they are most commonly

liable. The commonest of all, however, and the most fatal, is pneumonia. The missionaries have accordingly begun their cares by instructing the natives how to build cabins, having noticed that dwellings exposed to the winds are a frequent cause of the disease.

The women in these islands are delivered with a facility unknown among civilised nations. As soon as labour pains commence—wherever they are attacked, whether at the foot of a tree or on the seashore—the wives are delivered by the efforts of nature alone; in very rare cases is recourse necessary to assistance from the husband or the friends. In difficult cases a few women and even some men, enjoying a special reputation gained by experience, are called to effect the delivery; scarcely is the woman delivered than she goes to bathe in cold water, and resumes the usual course of her domestic duties. Nevertheless, the natives have traditions of some very difficult labours which lasted during several days. Serious disorders, ending in death, occasionally follow this dangerous practice of bathing in cold water. In general, however, the young mothers who bathe immediately after their delivery recover very well; by the third day the milk-fever has ceased, and the secretion of that fluid is performed with regularity. The women do not employ any plant either to increase the secretion of milk or to suppress it. Their (in this case) happy ignorance has no recourse to a host of useless means for this purpose.

The mothers suckle their children during about twelve months; a few have recourse to nurses for this purpose, but whether this is a privilege of the nobles, or whether all mothers who find themselves unable to suckle their infants have recourse to it, seems uncertain. The practice is a privilege of the royal family, without doubt.

The tenderness of the women of Mangareva towards their infants is very great; they are, therefore, excellent mothers in every acceptation of the term; still, however, there is no rule without an exception. One of the missionaries relates an instance of a mother wishing to bury her twin children alive; he was enabled to save them. These twins are at present seven years old. The husbands manifest considerable repugnance for their wives during menstruation and the period of gestation; on this head they seem to possess the laws of Moses in all their rigour.

A cemetery has recently been established in the Gambier Islands, after the European fashion; and the old custom of exposing the dead has been abolished.

Royal College of Surgeons.—Gentlemen admitted members on Friday, August 14, 1846, viz.:—Messrs. S. Gower, E. Whittle, T. Daniell, G. F. H. Brown, J. S. Nedham, H. Helsham, J. N. Tompson, S. Griffith, J. R. Humphreys.

Apothecaries' Hall.—The following gentlemen were admitted licentiates on the 13th of August, 1846:—Daniel Edward Hamilton, George Cheesman, Henry Winterbottom, Fred. Fawssett.

On Sunday morning last one of the wards in the Hotel Dieu of Paris was suddenly undermined. One of the patients getting out of bed felt the ground tremble, and gave the alarm just in time for the patients to escape without injury.

Surgical science at Lyons has recently received a severe loss by the almost simultaneous deaths of the two brothers Martin, senior surgeons to the Hôpital de la Ch... of that town. One died at the age of seventy-nine years, the other at the age of seventy-five.

Embalming Plants.—A Swedish botanist asserts that he has discovered a method of embalming plants. He has imparted his discovery to the Academy of Stockholm, and has sent there a rose-tea plant which he embalmed by this process in 1844, and which is still in a perfect state of preservation.

It is stated that the number of cases of insanity which have occurred lately has frightfully increased. At this time at the Saltpetrière all the female patients who had previously been calm have become furious.

The *Gazette* of Augsburg states that the typhus fever which raged during the month of July at St. Petersburg carried off at least 900 patients daily.

Cultivation of Rice.—There has been recently made in the environs of Arles an experiment in vegetable chemistry of the greatest interest. The cultivation of rice has been tried on the lands salted by the mouths of the Rhone, and has perfectly succeeded. This eminently productive culture has, besides, the advantage of taking the salt entirely from the soil, which is an alluvial soil of the first quality, so as to render it suitable for all natural productions. This year 300 hectares have been converted into rice grounds, an example which will doubtless be promptly followed.

Dr. Thibert.—On several occasions lately we have had to direct the attention of our readers to the collection of artificial preparations in pathology made by Dr. Thibert, and exhibited within the last year in London and Paris. We regret to announce the decease of the ingenious inventor, who had only reached his thirty-sixth year. Health, youth, and fortune had been sacrificed by Dr. Thibert to the perfecting of these models, and it appears that his life was brought to a close at the very time when there was some prospect of his reaping a reward for his scientific labours.

On the fifth instant, during the violent storm which broke over the town of Verdun and its neighbourhood, the lightning simultaneously struck a farmer and his wife. They both died instantly.

New Sign of Death.—M. Repault has lately directed the attention of the Academy of Sciences to a new sign of death. It is *perfect flaccidity of the iris* when the globe of the eye is compressed in two opposite directions. If the individual be living, the pupil retains its circular form, notwithstanding the compression. If he be dead, the aperture becomes angular, and the circular form is lost.

MM. Rambaud, surgeon-in-chief to the military hospital of Bonn, and Gasté, physician-in-chief to the African army, died in Algeria during the last month.

A strange epidemic has just broken out in the valley of the Isere. The disease commences with fever, pain in the loins, and pains in the head and chest, followed by vomiting; and it attacks the inhabitants very suddenly. It is chiefly prevalent in country districts.

The Medical Society of Paris have lately proposed, as a prize subject, the influence of the iodide of potassium in the treatment of syphilitic diseases. The last prize, consisting of a gold medal valued at 500 francs, was awarded to Dr. Payan, of Aix.

Sulphuric Acid in Colica Pictonum.—At Turin, where lead colic is very common, Dr. Bertini has during several years been in the habit of treating it with great success by means of the sulphuric lemonade.

Surrey Benevolent Medical Society.—The half-yearly meeting of this society was held on the 10th of August, at Box-hill, near Dorking, under the presidency of Mr. Martin, of Reigate. The society was instituted in 1812. It is supported by an annual subscription of £2 from each member, payable for twenty-five years only. The society at present possesses a funded property of £4,000, and affords relief to several widows and children of deceased members.

Dr. A. B. Garrod has been appointed physician to the Royal General Dispensary, Aldersgate-street.

Thread from Pine Leaves.—The leaves of the pine-tree, which is very common in Germany and France, but especially in Prussian Silesia, have hitherto been rarely used, except as food for sheep. M. Weiss, the proprietor of a forest at Zuckmantil, in Silesia, has discovered a cheap system of maceration, by means of which he obtains from these leaves a kind of thread and tow which leave nothing to be desired. The Baron Humboldt has reported on this subject very favourably; and the King of Prussia ordered, some time since, a hundred beds, of which the mattresses and the coverings were made of pine thread, for the military hospital at Berlin. It has answered perfectly, the resinous odour arising from it entirely driving off all insects. An establishment, to which M. Humboldt has lent his name, is now being built at Brœbnitz, near Breslaw, to carry out this useful invention.

The Potato Failure.—The accounts from Clare, in the south, and Armagh and Fermanagh, in the north, all speak of the rapid spread of the pestilence. In Armagh, it is stated, one half, at least, of the crop is already destroyed, and of the remainder the stalks are showing symptoms of decay, while the potatoes attached to them are no larger than walnuts. A gentleman of great practical experience in agricultural matters states that on his journey to Dublin he did not see three fields free from the prevailing pestilence, the stalks everywhere presenting a sooty rotten appearance. He is also of opinion that the wheat and oat crops will be below an average, at least in the midland districts, where they are not only thin, but extremely backward, considering the late period of the season. It appears that the potato can never again in Ireland be relied on as an exclusive source of food for the poor.

Mr. Pittard, the gentleman whose suspension we noticed a fortnight since in an editorial article of this journal, has, we understand, been reinstated in his office.

A searching investigation has just been commenced into the quality of the articles supplied as food to the patients in the Parisian hospitals. The investigation was excited in consequence of the delivery, at several of these institutions, of milk which was unfit for use.

Dr. Taylor has resigned the office of physician to the University College Hospital. Several gentlemen are candidates for the appointment.

We wish particularly to call the attention of pathologists, and of the governors of institutions possessing museums, to an advertisement of the sale of Dr. Thibert's collection of anatomical and pathological models in relief. These models have been highly praised by the scientific men of all nations.

MORTALITY TABLE.

For the Week ending Saturday, August 15, 1846.

Causes of Death.	Total.	Average of - years.	
All Causes	967	808	968
Specified Causes	958	802	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	288	201	188
Sporadic Diseases.			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	98	99	104
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	144	155	157
Diseases of the Lungs, and of the other Organs of Respiration	186	227	204
Diseases of the Heart and Blood-vessels	24	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	115	87	72
Diseases of the Kidneys, &c.	7	6	7
Childbirth, Diseases of the Uterus, &c.	9	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	10	6	7
Diseases of the Skin, Cellular Tissue, &c.	1	1	2
Old Age	32	52	67
Violence, Privation, Cold, and Intemperance	44	26	26

PROGRESS OF MEDICAL SCIENCE,
INCLUDING CHEMISTRY AND PHARMACY.

France.

ACADEMY OF SCIENCES.

Meeting of August 17; M. Mathieu in the Chair.

The Gymnotus.—M. Matteucci forwarded a short description of the electrical apparatus of this animal. According to the author, this organ consists of a large number of galvanic batteries, which can act either together or separately; the strength of the discharge being always proportioned to the length of the part of the instrument which is thrown into action.

Researches on the Human Blood. M. Bonnet, of Lyons, has repeated the experiments instituted by Professor Dumas, for the purpose of ascertaining the action of the chloride of sodium on the globules of the blood; and the conclusions he has come to are directly opposite to those of the learned chemist. According to M. Bonnet, the salt, far from destroying, preserves the corpuscles. M. Dumas endeavours to account for this difference of opinion by stating that it probably depends upon the albumen of the blood, which M. Bonnet neglected to separate in his experiments, thus preventing the absolute contact of the salt with the globules. M. Bonnet has further remarked, that the hydro-sulphate of ammonia destroys the globules completely, and deprives the blood of the faculty of assuming the bright scarlet colour of arterialisation.

ACADEMY OF MEDICINE.

Meeting of August 18; M. Roche in the Chair.

The Plague.

M. Mélier, secretary of the Academy, handed in the following written amendment, to be discussed at a future meeting:—"The Academy expresses a desire that Government should call together a congress of delegates belonging to the different countries interested in the settlement of the quarantine question, in order to come to an agreement by common consent, on the duration and conditions of quarantines, and to make them obligatory to all nations concerned."

M. Sanson, in a letter, proposed a resolution analogous to M. Mélier's amendment, and also that "at least one ship be placed in the port of Alexandria, at the disposal of the authorities, in order to convey pestilential subjects beyond the reach of morbid influence."

M. Castel objected *in toto* to the report; the first conclusion was an assertion of truisms; all the others were merely the statement of facts, a sort of recapitulation of the various parts of the report, but not deductions from its arguments.

After some further remarks of M. Adelon, the meeting was adjourned at an early hour.

SOCIETY OF SURGERY.

Meeting of August 5, 1846; M. Chassaignac in the Chair.

Cataract.

Professor Berard presented to the meeting a crystalline lens of a stony consistency, which he had extracted under the following circumstances:—A lady, aged thirty-five, was since her birth blind in the left eye, and, fifteen years ago, on examination, the blindness was found to depend on opacity of the lens. Towards the end of the month of June last, without any apparent cause, the patient experienced a sudden pain in the head, and, on looking into the eyes, the lens was seen in the anterior chamber; a violent ophthalmia having supervened, was treated without success by antiphlogistic measures and purgatives; the removal of the lens was accordingly resolved upon. The division of the cornea was performed with a great deal of pain, and the lens was extracted; a broad strip of adhesive plaster was placed over the superior eyelid, and the inflammation gradually subsided after the operation, although it was followed by excessive suffering. Vision has not been restored.

M. Robert had seen similar cases, and would have followed the plan indicated by Sanson, viz., dividing the cornea in its upper part.

M. Nélaton attributed the displacement of the lens to the great dilatation of the pupil; he had observed that in these cases the passage of the lens into the anterior chamber usually took place during the night.

Aneurism.—M. Malgaigne related the case of a child who presented on one of the anterior branches of the temporal artery two small aneurismal tumours of the size of large peas, which he at first intended to operate upon by M. Petrequin's method of galvano-puncture. But, being unable to procure a proper battery, he merely passed pins through the tumours, and threw over each a twisted suture, which he left for twelve days in situ; at the end of that period the cure was complete.

Hydatic Tumour of the Womb.

M. Malgaigne then laid on the table a uterus containing an enormous hydatic cyst. The following is the history of the case:—

E. S., aged twenty-seven, had always been a woman of delicate health. Almost every day she was affected with sickness, and threw up bile and food; at eighteen she was married, and first menstruated only at the age of nineteen. Her first pregnancy, which took place soon after, was not attended with any peculiar symptoms, and she gave birth to a child who lived nine months, and died from convulsions. Twenty months ago she again became pregnant, and the child lived but one month; in both pregnancies the uterus was extremely distended, and the quantity of the amniotic fluid appeared unusually considerable. Since the month of May last the menses had not been observed, and, from the middle of June, the abdomen began to swell, and had attained at the end of July the size of an eight months' pregnancy. She was admitted into the hospital on the 24th of July, and complained of slight hemorrhage and continual vomiting; she also suffered from cramps in the legs, headache, giddiness, and loss of appetite. Examination per vaginam showed the os-tincæ to be extremely high, but healthy. Eight ounces of blood were taken from the arm, and the patient declared herself much relieved, the uterine hemorrhage having stopped. During the night of July 26, the discharge of blood reappeared, and with such violence that in the space of a quarter of an hour the two mattresses and the bed-clothes were completely soaked through. Notwithstanding cold lotions, and the application of a plug, the hemorrhage returned, and the patient died in the morning.

Dissection showed that the distended uterus occupied the whole abdominal cavity, and the womb, removed from the body, shot forth through the os-tincæ a considerable amount of arterial blood. The transversal circumference of the viscus measured sixty centimetres (twenty-two inches), and the perpendicular circumference sixty-six (twenty-five inches). On opening the uterus it was found to contain, not a fœtus, but an immense number of transparent vesicular bodies of the size of peas, attached to each other in bunches; no trace whatever of a placenta was detected. This mass did not adhere to the uterine walls; and in the fundus was noticed a surface larger than the palm of the hand, and deprived of that polished appearance observable in the other parts. The thickness of the parietes of the womb was from four to six lines.

M. Gosselin had no doubt that it was a case of diseased placenta. The special tissue was not, it is true, present; but similar instances have been repeatedly met with in which the placenta is positively visible, enclosing the hydatids, the formation of which causes the embryo to disappear.

M. Monod regretted that no effort had been made to arrest the fatal hemorrhage. He was of opinion that compression of the aorta ought to have been tried.

M. Robert then showed an astragalus which he had removed in a case of dislocation of the foot lately been placed under his care. We have, in a former communication (vide *Med. T.*, p. 342), published the case in the columns of the *Medical Times.*

Albuminous Nephritis in Pregnant Women.—This subject has been the object of the particular study of Dr. Cahen, late *interne* of the Parisian hospitals. The following is the result of his experience:—In pregnant, but healthy, women the urine is never albuminous; it should be tested with the greatest care where the patient complains of unusual lumbar pains, &c., when the lower extremities or the face are the seat of any œdema. Pregnancy seems to favour the production of albuminuria; and this complication is a frequent cause of premature delivery, and of convulsions. Indeed Dr. Cahen asserts that he never met, in any case, with albuminous urine during pregnancy, without the discovery being followed by one or the other of the accidents above mentioned. After confinement the urine generally returns rapidly to a healthy

condition; the anatomical alterations observed, after death from convulsions, all belong to those attributed to granular kidney. The best treatment consists in venesection.

HOPITAL DES ENFANS MALADES.

CLINICAL LECTURE BY M. GUERSANT, JUN.

DISEASES OF THE URINARY ORGANS.—Two cases presenting some common symptoms, although their nature is widely different, have been lately admitted into the wards. The first is that of a boy aged five years, pale, and slightly œdematous; for the last six weeks he has complained of pain in making water, and has dragged his urethra like children affected with calculus. These two symptoms, viz., infiltration, and difficulty in the emission of urine, point each to a different complaint: the first a disease of the kidneys; the second a foreign body, probably a calculus in the bladder. No eruptive fever has lately been observed, and the anasarca cannot be attributed, therefore, to that cause. Six weeks ago, however, the child having had sore eyes, a blister was applied to the arm, and the sore was dressed and kept open with cantharides. This fact led us to discover that the pain in making water was solely due to the mode of dressing the blister, which we at once changed. On testing the urine with nitric acid, it deposited a large proportion of albumen, thus leaving no doubt as to the nature of the complaint. A catheter introduced into the bladder failed in meeting with a calculus. A tonic regimen and gelatinous baths have been prescribed.—The second case is that of a child of the same age as the former, who also complains of pain during the emission of urine, and who also endeavours to lengthen his penis in order to get rid of an inconvenient tickling sensation. The child is usually well fed and enjoys good health. On examination of the bladder we detected the presence of a calculus, of the size of a hazel-nut, which appeared to us too hard and too large to be crushed. Lithotomy, besides, is generally so successful in children that we perform it as often as an opportunity occurs. We have now operated upon thirty children, five of whom only died; a sixth we also lost, but he was quite cured of the perineal wound, but caught the measles, and died of double pneumonia in our wards. We count, therefore, only five deaths out of thirty operations. It is not always after the severest operations for lithotomy that danger is most to be apprehended. In one child, who was cured perfectly, we had to introduce the scoop and forceps twenty-five or twenty-six times, in order to remove upwards of three ounces in weight of calculi.

GANGRENE OF THE LEG.—We have also admitted a little girl, aged ten years, affected with a gangrenous sore of the leg. When she was brought to hospital the child was already in the most unfavourable condition, both local and general: her constitution is very evidently scrofulous, and she had borne for some time an ulceration of the left leg, with a greyish fundus, clearly threatening gangrene. The sore at present occupies the entire of the external aspect of the leg from the malleolus almost to the knee: the muscles are denuded and gangrenous; the fibula, and several of the bones of the metatarsus, are disarticulated by the progress of the disorder. The chest presents no physical sign of consumption; but the tongue is dry, and the face slightly swollen. This is a bad case: amputation affords us but slender chances of success; however, it is the only one, and we would be guilty were we to neglect it.

HOTEL DIEU, LYONS.

ANEURISM AT THE BEND OF THE ELBOW, CONSEQUENT ON THE OPERATION OF VENESECTION.—GALVANO-PUNCTURE—CURE BY A SINGLE OPERATION.

We have already, on different occasions, noticed several cases in which aneurismal tumours have been cured by inducing coagulation of their contents by means of electricity. It gives us pleasure to be able to add another case, which was treated by M. Petrequin, of Lyons.

The patient, Edward Foucet, a student in pharmacy, aged thirty, living at Salins (Jura), had suffered during eight years from hypertrophy of the heart. For the relief of the urgent symptoms produced by this affection he underwent various modes of treatment, and placed himself under the care of Professor Chomel, of Paris. He was bled from time to time to diminish the palpitations from which he suffered severely. In February, 1846, he was bled by M. X., a surgeon at Arbois, who unfortunately wounded the brachial artery. A large swelling formed immediately, presenting the appearance of a simple ecchymosis, or infiltration of blood. As the primary swelling was absorbed, however, a small tumour became evident in the situation of the wound made by the lancet; this increased daily, and showed evident signs of pulsation. The patient became uneasy, and by the advice of Dr. Matuszewicz, a Polish physician, practising at Salins, he went to the Hotel Dieu, at Lyons, on the 8th of May, 1846, to be operated on by the galvano-puncture.

The hypertrophy of the heart was marked chiefly by a very distinct *bruit de souffle*, with prolongation of the first sound, violent motions of the heart over a large extent, and frequent palpitation. The aneurism at the bend of the elbow had been formed more than three months; it was larger than a pullet's egg, and was situated in the course of the brachial artery, forming a very prominent projection. At its most projecting part the cicatrix of the wound made in venesection was evident. The tumour was the seat of rapid, expanding pulsations, isochronous with the pulse, and which were very evident to the eye. The integuments were glossy, and the swelling gave an obscure feeling of fluctuation. No stratified coagula could be felt in the sac. A well-defined *bruit de souffle* was heard through the stethoscope, which ceased on the brachial artery being compressed above the tumour. The pulsations in the tumour ceased when the brachial artery was compressed between it and the heart, and it diminished in size also very considerably; compression on the distal side of the tumour produced no such phenomena.

Although the concomitant disease of the heart was an unfortunate complication, still it was not, in the opinion of M. Petrequin, sufficient to deter him from operating on the aneurism; but he wished to diminish the heart affection previously, if possible. For this purpose he confined the patient to a rigid diet; enjoined rest, and ordered soothing medicines, with sedatives internally, and the external use of belladonna over the cardiac region. After three weeks' perseverance in these means the disordered action of the heart had so far abated that M. Petrequin considered the patient in a fit state to undergo the operation, which he performed accordingly before Dr. Barrier, and a large number of pupils, on the 5th of June.

The patient being seated, with his arm extended on a table by his side, and supported by assistants, M. Petrequin inserted in the tumour four sharp-edged needles of seven or eight centimetres in length, so that their points should cross one another within the sac of the aneurism, as we have before described (see *Medical Times*, page 284). The person who had been desired to cover them with a coating of some non-conducting medium having neglected to do so, M. Petrequin used those needles without the coating. The battery consisted of sixty square plates of eight centimetres in diameter; and the layers of cloth were dipped in a solution of sal ammoniac. The assistant having compressed the brachial artery so as to stop the pulsations in the tumour, the heads of two of the needles were connected with the two poles of the battery by means of two brass wires, which were held by assistants, after being wrapped in silk. The galvanic current was very intense, and gave rise, at intervals, to brilliant sparks of a golden yellow colour. The shocks were violent, and the patient was supported in his place by assistants. The tumour at first decreased in size; it then became red and distended. The patient complained of a burning heat in the points where the needles were inserted, and a little cauterised eschar was produced round each of them. After ten minutes, M. Petrequin felt the thickness of the tumour increased; a kind of base became manifest in it, and it was evident that layers of coagula had formed. The action of the battery was still continued, each pair of needles being alternately connected with the poles. The patient was agitated, and experienced acute shocks; he fell into a profuse perspiration; but he was full of confidence in the result, and submitted with courage to the operation. After a continuance of the galvanic action during fifteen minutes, M. Petrequin felt that the tumour acquired greater hardness, and that no pulsation took place in it on removing the pressure from the brachial artery. Still, however, he continued the galvanic action for five minutes longer, by which time the sac had acquired a considerable density. The needles were then successively removed, and no pulsation returned. A ring tourniquet was then placed over the artery, and a bladder full of ice on the aneurismal tumour. The patient walked to his bed, but his limbs were relaxed and tired, as though he had undergone great fatigue. The day passed without any appearance of fever, the patient only complaining of the pressure from the tourniquet.

The next day he was better and more tranquil. The tumour was much less evident, chiefly because it was hidden by the swelling of the parts around it, caused by the compression. He was kept on a strict diet, with sedative medicines. The tourniquet was removed for an hour, and the tumour remained without pulsation. On the second day after the operation (June 7) the pulse reappeared, in the radial and ulnar arteries. The patient had slept well, and the forearm was less swollen. The tumour had already diminished considerably; it presented no pulsation to the touch, and no *bruit de souffle* on being examined by the stethoscope.

On the 8th the tourniquet was removed entirely. The forearm was not swollen, and the patient had slept well. He complained, however, of palpitations of the heart, which, without being more violent, were rather more rapid than before. In the evening the patient complained of acute pain in the bend of the elbow. The part was hot, notwithstanding the continued application of ice. M. Petrequin attributed this to the influx of blood consequent on the removal of the tourniquet. He prescribed a topical bath of cold water, into which the patient was directed to plunge the limb, and retain it for several hours. This gave immediate relief.

On the 9th the abnormal heat had nearly disappeared; it continued, however, in the bend of the elbow, which was painful on pressure. Inflammation of the aneurismal sac was evidently present; otherwise the patient's state was good, and he had a good appetite. On the 10th the tumour had nearly disappeared; it was, however, the seat of dull pain. The little eschars were about to become detached, and were surrounded by an areola of inflammation; two of them discharged a seropurulent matter. On the 12th the eschars separated one after the other, leaving openings by which a sanguinolent serum was discharged. The pain was relieved. On the 13th a blackish pus escaped, which the patient found very offensive. By making pressure around the seat of the aneurism, M. Petrequin pressed out little black lumps of coagulated blood, the debris of a semi-organized clot.

On the 14th and 15th suppuration of the sac continued, the aneurism had entirely disappeared, no vestige of it remaining, and the sac was empty.

On the 16th the arm had resumed its size and shape; the discharge had diminished, and M. Petrequin placed a compress over the sac in order to favour its contraction, and to obtain, if possible, adhesion of its walls. On the following day this was found to have produced an excellent effect. The wounds had become quite superficial, being no longer of greater depth than the thickness of the skin. Adhesions were established between the walls of the sac. The compression was nevertheless continued, and by the 20th of June the patient's cure was perfect. There was no longer the least trace of the tumour, and the radial and ulnar arteries pulsated naturally. On examining the condition of the heart, the palpitations were found to be less violent than before, but the *bruit de souffle* continued; the state of the patient's general health was, however, excellent.

On the 22nd he got up (having been previously kept in bed as a matter of prudence), supporting his arm in a sling. He took cold on the 24th,

and had a slight attack of fever with bronchitis, which detained him in the hospital till the 4th of July, when he was discharged cured. He afterwards presented himself before the Medical Society of Lyons, when pulsation could be felt throughout the whole course of the brachial artery, even in the situation of the wound. The motions of his arm were perfect, and his general state of health was good.

THE SPAS OF THE RHINE.

BY PROFESSOR TROUSSEAU AND DR. LASEGNE.

(GOUT—Section 6, continued.)

In old men passive gout becomes gradually established: in some few, indeed, the change which is brought on in their constitution by the progress of age is alone sufficient to produce a cure; but, in most cases the fits become irregular in their return and in their intensity. The symptoms threaten other joints before they fix upon their habitual seat. In these circumstances a debilitating plan of treatment is clearly to be rejected; it would seem more applicable to those aged persons who have preserved, to a certain degree, the constitution of their mature years, and who are still attacked with acute gout; but even here caution is necessary: reaction is slow in advanced age, and it must not be forgotten that many old persons have paid dearly for a sudden improvement, and have died because they had been imprudently cured. We, therefore, in old subjects mistrust the use of alkaline mineral waters, and cannot forget, that although a few of the aged have really preserved their strength, the greater number only enjoy apparent vigour, which is ready to yield at the slightest cause of disturbance; but in youthful plethoric subjects the Ems waters, on the contrary, succeed to a marvel. In these patients the symptoms and their prodromic signs are perfectly well marked, the paroxysms are regular, no tendency to displacement is observed: it is the disease in its normal state, horribly painful, but accompanied with no other disorders than those which generally follow acute suffering. In these cases the urine is highly coloured, and deposits an abundant sediment. Alkaline waters can then be prescribed with the greatest benefit: at the same time strict temperance must be observed; early hours, and exercise carried even to fatigue, will be ensured at the spas, by the excursions into the country, the change of habits, the new associations, and the necessity of rising early in order to drink the waters.

In atonic gout the treatment must be energetic in order to be useful, and, the patients experiencing only a trifling amount of pain, have no tendency to go beyond the prescriptions of their medical adviser. The progress of the disease is more insidious than in tonic gout, but it is not the less dangerous, and the physician requires all his acumen to recognise this Protean disease in its various disguises. It is in appearance a benignant, but in reality a very serious, malady, which constantly places the patient in danger, and gradually renders life insupportable. It is of these patients that Guy Patin said with much truth:—"If you have gout, you live in pain; if you have not, you live in fear." (Quand vous avez la goutte, vous êtes à plaindre; quand vous ne l'avez pas, vous êtes à craindre.)

We observe atonic gout often in patients who return cured after too long a sojourn at Ems or Vichy. The attacks have lost their vivacity; the disease is unsettled; the foot is numbed and heavy; the extremity is œdematous. Matters may continue in this state for weeks, and even months, without the occurrence of a paroxysm; the improvement is then slow, and occasionally sudden; abandoned to nature, these gouty subjects die of dropsy, or of the progress of anasarca. Their constitution destroyed by the use of alkaline substances, brings to mind the peculiar anatomical state of the inhabitants of fenny districts, who have long laboured under ague.

If any resource exists, the physician may still find it in the use of stimulant mineral wells—Hombourg, Kissingen, Kreutznach, Wiesbaden, for instance; they gradually give power to the reactions, and at last occasion a violent paroxysm of gout—one of those fits which the patient formerly was desirous of getting rid of at any price, but which he now regrets. A new regimen must be called in to assist the object the physician has in view: rich and delicate food, good old wine—the famous Pontay or Tokay for instance, which Hoffman prescribed with such pertinacity.

Atonic gout, which we might call also œdematous gout, is easily recognised. At Ems or Vichy it would grow incurable; at Hombourg it is speedily relieved. The gastric complications first yield, and a nourishing diet completes the restoration of the blood to its normal composition.

Under the influence of this powerful treatment the convalescents return through all the degrees of passive gout, and, if the medication be not arrested in time, they would be attacked with the acute symptoms of the tonic form. It then becomes necessary to moderate the treatment,—an uncommon occurrence, on account of the slowness with which such revolutions generally proceed.

In other and more insidious cases, the constitution of the patient appears rather plethoric; the attacks do not fail in vivacity, but the prodromic signs are slow in their progress; the respiration is embarrassed, or the digestion extremely difficult and painful. This form is exceedingly moveable. Many suffer from horrible gastralgia, or from asthma, before the appearance of the first attack. Unfortunately, in such cases, we are obliged to act often upon chance indications; these are much better marked, however, when the patient has already had one attack of gout: it is then that mineral waters can be most advantageous.

Hemorrhoidal patients afflicted with gout also deserve a separate study. The piles may have appeared before or at the same time with the gout: the latter occurrence is the more favourable of the two. To such patients Hombourg and Kreutznach are of use: they increase the intestinal congestion, and fully establish the hemorrhoids. By the combination of the dry and of the purgative cures the most happy results may be anticipated. Where, on the contrary, the piles have appeared before the gout, they seem much less closely connected with the articular disease: they interfere with the fits, diminish perhaps their violence, but contribute to increase their length, and to make their return irregular. We place for such cases much confidence in waters containing chlorides and carbonic acid. The increase of the hemorrhoidal affections will in all cases be serviceable to the gout.

A third class of gouty subjects presents the attributes of what is called the nervous constitution; these patients are troubled before the paroxysms with spasms, cramps, and agitation. If the gout displaces itself, it is chiefly the thoracic organs which are observed to suffer, asthma being frequently the result. The indications in these cases are far from being clear; when the gout is atonic the Hombourg wells will be found useful; and when it is a little more active, the Selters spas should be recommended. Perhaps to this form hydropathy would be more applicable than to the others; on this point, however, experience has not yet pronounced.

Such are the great practical divisions which we have thought it right to introduce into this arduous and complicated subject; but, if the types are true, still observation shows that they are often mixed and combined in the most embarrassing manner. Perhaps no patient is so difficult to observe and to direct as a gouty subject. We appeal to the recollection of those who have had to deal with them. The question we have attempted to examine is one of extreme delicacy; to say that such or such waters are good for the gout is absurd; we might as well recommend a medicine against headache, or another for the chest.

On the 1st of July the Society of Pharmacy of Belgium met at Amsterdam, in general assembly, convened for the purpose of promoting the interests of scientific pharmacy. This assembly resolved to memorialize the Government, demanding new laws to regulate the practice of medicine and pharmacy.

England.

INTERESTING CASE OF POISONING BY ARSENIC, IN WHICH NONE OF THE USUAL SYMPTOMS WERE OBSERVED.

BY J. H. HOUGHTON, ESQ., Surgeon to the Dudley Dispensary.*

Mr. Houghton was called at a quarter past eleven o'clock on the morning of the 15th of April last, to see Mrs. B——. He was immediately joined by two medical friends, and proceeded to her residence. He found her in a state of considerable mental excitement, but without any symptoms of cerebral affection. The patient told him, very collectedly, that about three-quarters of an hour previously she had taken half an ounce of arsenic, which she had that morning procured from a druggist in the town; and on inquiry it was found that she had been supplied with the poison.

She was, however, free from the symptoms usually attendant upon the ingestion of corrosive poison. She had not any thirst, pain, heat, or constriction of the throat or fauces, epigastric tenderness, vomiting, tormina, abdominal pain, or discharge from the bowels.

Mr. Houghton immediately applied the stomach pump, and in a short time the stomach was well washed out with water, and subsequently with soap and water. Albumen was then given freely, and afterwards doses of sulphate of zinc, which produced free vomiting. At twelve o'clock the hydrated peroxide of iron (made by adding liq. ammoniæ to a strong solution of sulphate of iron, as long as any precipitate fell, collecting the precipitate, washing it, and finally gently heating it, to drive off the ammonia) was given—a tablespoonful every five or ten minutes.

The patient was then put to bed, when she became composed, and almost free from pain, but had occasional gentle fits of vomiting, of a bilious character, this being the only symptom. Her pulse was rather feeble, and she soon seemed disposed to doze. This continued till a little past two, when Mr. Houghton left her for a time, with directions to continue the iron.

Shortly after Mr. Houghton left the house, her bowels were moved with some tenesmus, by which she was kept on the night-chair for nearly half an hour. At a little before three she was visited by a Mr. Roberts (who had previously seen her), and who found her in a state of collapse. He promptly applied external stimulants, and gave her small quantities of brandy-and-water and ammonia. (The iron was now discontinued, and not resumed.)

From this state of depression the patient never properly rallied, but remained quiet, dozing from time to time, but perfectly calm and collected, till twelve P.M., when she died. She presented no gastric symptom, except occasional mild vomiting; but whatever the stomach received was soon rejected; no tormina, tenesmus, or strangury; no cramp; and no cerebral or spinal symptom, to the last.

An examination of the body took place fifty seven hours after death. As, however, the presence of arsenic in large quantities was evident in the ejected fluids on the application of the usual tests, the stomach only was examined, out of respect to the wishes of the deceased's relatives.

At the pyloric end, on the posterior surface of the organ, a bright-red patch, nearly the size of the palm of the hand, was observed. On the posterior part of the stomach several streaks, about half an inch wide, of a black colour, and running from above downwards, but slanting from the cardiac to the pyloric end of the stomach, were observed. The intervening parts of the surface of the mucous membrane had a natural appearance. Where the black colour was less intense, a pinkish blush could be observed through it; and on washing the black deposit away, which was effected with difficulty, the mucous membrane beneath was found to be considerably inflamed. This black deposit was left wherever the mucous membrane was inflamed, excepting on the red patch near the pylorus, and nowhere else. It was most copious also where the inflammation was most severe.

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* Condensed from a late number of "The Lancet."

There was not any destruction of the mucous membrane in any part of the stomach; it contained about three-quarters of a pint of darkish-green fluid, of the consistence of thickish soup. Small red vascular patches were seen on the small intestines, in various parts, as they lay *in situ*.

The contents of the stomach and part of the organ were reserved for analysis. The last sixteen ounces of fluid brought up by the stomach-pump were also reserved merely for experiment. The contents of the stomach, which were ejected by the sulphate of zinc, had been also reserved.

On Friday afternoon a little of the fluid, which seemed little more than coloured water, was added to a mixture of zinc and sulphuric acid, and the gas which escaped was burned by means of a jet. By holding a clean white china plate in the flame, a copious deposit of a bright metallic lustre was produced.

A portion of the same fluid was placed in a test-tube, and to it was added some ammonio-nitrate of silver. A bright-yellow deposit resulted. To a portion of the same fluid was added the ammonio-sulphate of copper. A bright-green precipitate resulted.

April 20. After the inquest, a part of the contents of the stomach was boiled in distilled water, filtered through charcoal, and the fluid submitted to the ammonio-sulphate of copper and ammonio-nitrate of silver without any result in either case. Some of the fluid was then added to a mixture of zinc and sulphuric acid as above; for the first minute or two a slight metallic-looking deposit was formed, after which no deposit could be obtained after frequent careful trials. A very small quantity of the fluid was now added to the mixture, when the accustomed metallic deposit was freely procured again. A little of the fluid was again submitted to the tests above described, with the same results as on Friday.

Tuesday, April 21. The reason of the slight deposit obtained the day before at the commencement of Marsh's test was now explained. The zinc which had been used on Friday was by mistake used again, and probably a slight portion of arsenic had adhered to it, and soon passed off. The stomach was now sliced into small pieces, and mixed with the remains of fluid; to it was added a little distilled water, and one-tenth part of pure hydrochloric acid. The whole was boiled in an earthen vessel till the stomach was completely dissolved, and filtered through some old linen. The fluid being very thick was diluted with a little weak hydrochloric acid. A part of the fluid thus obtained was boiled again, and, just before ebullition commenced, some thin, bright copper-plates were thrown into it, and boiled for half an hour. When the plates were removed, they had just the appearance of unwrought steel, as seen in steel warehouses, not bright or shining. The plates were carefully dried before the fire, placed in a small tube, and submitted to a gentle red heat in a spirit lamp. A slight black deposit took place in the tube, but no crystals could be observed with a common lens.

The tube was now broken, and boiled in distilled water for some minutes; the fluid thus obtained was submitted to the ammoniated nitrate of silver, producing a very faint and equivocal yellow tinge; and to the ammonio-sulphate of copper, producing an equally faint and equivocal green tinge. The remains of the fluid were reserved for further examination.

30. One ounce of the residue of the fluid was now boiled with two drachms of pure hydrochloric acid, and to this one drachm of pure nitric acid was added: this was diluted with a little distilled water, and filtered through charcoal. A clear fluid with the slightest lemon tinge resulted. To a little of this fluid was added, first, the ammonio-sulphate of copper, producing a bright green precipitate; second, the ammoniated nitrate of silver, when a thick white precipitate, very much like white lead was produced: this experiment was repeated when the same white deposit resulted, streaked however, with a clear yellow. Third, a stream of hydrosulphuric acid gas was passed through a portion of the fluid, when a very copious orange deposit resulted; the precipitate was collected and treated with black flux on a tube; some very minute specks of a steel-like appearance were observed in the tube by a common lens. Fourth, some of the fluid was now added to a mixture of zinc and sulphuric acid, in a common bottle, and the gas which escaped burned through a jet; the accustomed shining deposit was freely procured on a white china plate (the white deposit formed by the ammonio-nitrate of silver, which had been filtered and placed on one side, had now become almost blue). Fifth, to some of the fluid was now added a few drops of pure nitric acid, and then an excess of nitrate of silver; a copious white precipitate resulted; this was strained through filtering paper, and the clear fluid which resulted treated with ammonio-nitrate of silver, producing the accustomed yellow precipitate.

1. To some of the same fluid was now added a solution of prussiate of potash, when a bright, deep blue precipitate resulted; this blue was dissolved by ammonia, but not by the strong acids.

2. To some of the same fluid was added a solution of oxalic acid, when the whole became yellow, but without any deposit.

This case, Mr. Houghton very properly remarks, presents two especial points of interest.

1. The fact of half an ounce of arsenic having been taken for nearly an hour, and having produced scarcely any symptoms.

2. The effects of the antidote on the poison remaining in the stomach, after it had been carefully washed and emptied, as proved by analysis after death.

To the first point Mr. Houghton calls the particular attention of the profession, inasmuch as the absence of symptoms would be likely to lead any medical man into the belief that the patient was endeavouring to deceive for some unknown purpose. The treatment in Mr. Houghton's case was indicated solely by the account received of the poison having been taken, and not by the symptoms which it had produced, for, with the exception of some nervous excitement, no symptoms were present when the patient was first seen. An hour had elapsed without any effect having been produced: this is a longer time than generally intervenes, though cases are recorded in which the poison had been dormant two, three and even five hours. In these cases the patient had slept after taking the arsenic.

Comparing the symptoms existing in this case with those characteristic of the second class of symptoms produced by arsenic, as described by Christison, Mr. Houghton thinks he can scarcely say that they belong to that class. The only symptoms of narcotism being drowsiness and a feeble pulse, the case may be properly classed with a case by M. Labordes, quoted by Dr. Christison, in which the patient had no symptoms till forced to drink, when she vomited freely, but without uneasiness. In five hours she became drowsy, and died, complaining only of slight pain in the stomach. To this case it seems to form an exact parallel.

On the second point Mr. Houghton observes that the effects of the iron were very remarkable. With the exception of the "red patch" near the pylorus, every part of the mucous membrane which had been acted upon by the poison was thickly coated with iron, which it required considerable trouble to wash off with a sponge, as though the antidote had been attracted and firmly held by the poison, which, indeed, had so completely combined with it as to be incapable of detection upon repeated careful experiments.

Mr. Houghton inquires whether the absence of the iron on one "red patch" is to be attributed to that particular spot having been freed from arsenic by the means used to dislodge it?

The absence of free arsenic in the stomach after death, and the evidence of abundance of it after means had been taken to set it free, are facts of the greatest practical importance. They form strong corroborative evidence of the value and efficacy of the iron as an antidote, and hold out the strongest inducement to administer it promptly and freely in cases where arsenic has been taken in poisonous doses.

ORIGINAL LECTURES.

A Course of Lectures on Practical Midwifery.

By EDWARD RIGBY, M.D.,

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Delivered last session at St. Bartholomew's Hospital, and revised by the Professor for the "Medical Times."

TREATMENT OF AFTER-PAINS. MECHANISM OF PARTURITION.

At our last meeting, gentlemen, I promised to commence this evening the subject of the mechanism of parturition. Before doing so, however, I have a few words to say to you on the pains which continue during a variable period after labour. We find these pains after most labours, but they vary much both in duration and severity. They are always most severe in women who have borne many children, and in some multiparæ they continue from twenty-four hours to three days. These pains, in common with those of labour, depend on contraction of the uterus; and these contractions are kept up after labour by the presence of the lochia or of coagula of blood, or of shreds of membrane in the cavity of the uterus. The afterpains, therefore, you will easily understand, are essential to the due emptying of this organ. Afterpains are not usually felt in primiparæ. In multiparæ, when the woman is quite healthy, they seldom continue very long. When very severe, and of very long continuance, they may be considered as indicating the presence of inflammation, or, at all events, of a state bordering on inflammation. The pain no longer comes and goes in distinct intermissions, but it gradually becomes constant; the uterus, too, becomes tender on pressure, and the other symptoms of inflammation are established, but we shall have to consider this subject hereafter when speaking of puerperal fever. You must, however, bear in mind, gentlemen, that long-continued and severe afterpains may form an insidious transition to a state of inflammation.

The treatment pursued during the last few days of pregnancy has great influence in modifying the afterpains. If the woman be allowed to go even up to the period of her labour with her bowels confined and loaded with unhealthy fæces, and with the secretions of the primæ viæ disordered, the uterus seldom contracts well during labour, and, under these circumstances, afterpains are sometimes very severe. The too rapid expulsion of the placenta, and the hasty conclusion of the last stage of labour, so that the uterus does not contract fully and firmly, are also causes of the contractions which cause these afterpains; and in these cases the afterpains are useful in expelling the clots and lochia which, if allowed to remain, would become putrid, and thus prove a source of irritation, and, perhaps, give rise to puerperal fever. When the practitioner neglects to apply the child to the breast as soon as labour is concluded, the uterus does not contract fully, as I have before told you; this, therefore, is another reason for early suckling. In speaking of the application of the child to the breast, I believe I forgot to mention to you the fact of nurses having a saying that "the child brings afterpains." This occurs to a great extent when the infant is not applied to the breast until the third day, and is, therefore, another reason, if more were required, for its early application.

Although afterpains are commonly, no doubt, excited by the presence of coagula in the cavity of the uterus, still they may sometimes occur when no such coagula are to be found. On this subject Dr. Burton, of York, who published in 1751, has given some curious observations which I shall read to you, as, in my opinion, he explains one cause of afterpains very satisfactorily. Dr. Burton says, "Upon the expulsion of the child and the placenta, the orifices of the uterine sinuses must contract, and thus retain the grumous blood which is in them; hence the use and benefit of these afterpains, which, by stimulating and compressing the vessels

and muscular fibres, make them exert their force to squeeze out this grumous blood, which otherwise might remain there and occasion inflammation, suppuration, &c.; from all which we find that these afterpains are necessary towards removing or preventing an inflammation of the womb; therefore, we must not be too forward in giving strong opiates, and other internal medicines, which may take them off whilst this grumous blood is lodged within those sinuses. I doubt not," continues Dr. Burton, "that those patients who die from the eighth to the fourteenth day, whose uterus has been inflamed with the symptoms above mentioned, have been injured by the too free use of opiates." The discharge, gentlemen, in these cases contains little vermiform shreds, and these shreds do not consist of portions of membrane which have been left behind, but they are the casts or moulds as it were of the cavities of the blood-vessels, and are composed of their contents coagulated. Dr. Burton mentions a case to which he was called, in consequence of severe afterpains coming on sometime after labour; in this case, having introduced his hand with some difficulty, he perceived several small membraneous strings, as he then thought them, adhering to the uterus; but, he says, "I was soon undeceived, for, upon expanding my fingers, by which I stretched the womb a little, several of these came into my hand, which I drew out, and found what I had imagined to be membranes to be only oblong grumous blood resembling fibres like those that adhere to a spatula after stirring arterial blood in a basin for some time. I introduced my hand a second time," he continues, "and made the experiment again, but found none of these little clots within the cavity of the womb; yet, upon expanding my hand, several came out of the orifices again which I could plainly perceive, and, after keeping my hand there a little while, I brought away all that were in the cavity of the uterus, and the patient's complaints immediately abated, and she recovered well from that moment." These little vermiform fibres are, therefore, you see, gentlemen, the casts of the blood-vessels, the contents of which had coagulated, having been retained by the contraction of their orifices. By being careful not to hasten the last stage of labour, so as to give the uterus time to contract slowly, the uterine sinuses expel their contents, and the annoyance of afterpains is, in many cases, altogether prevented.

It was formerly the practice always to administer a large dose of laudanum to check these afterpains; and a most pernicious practice it was, and one which, I am happy to say, has diminished considerably of late years. As much as forty minims of tincture of opium were administered as a rule in all cases by some accoucheurs. I need hardly point out to you the falsity of the reasoning on which this practice was founded. Opiates should never be given for the purpose of checking afterpains, unless they are very severe, or in some peculiar cases which will come under our consideration hereafter. Should your patient, however, have been accustomed to an afterpain draught, as it is called, and seem to expect it from you, you can give her a little tincture or extract of hyoscyamus or of lettuce. A mild sedative may, however, in many cases be useful after labour, as when the system is in a state of irritability and restlessness, consequent on the fatigue and irritation of a lengthened period of suffering; but in these cases a small dose of Dover's powder or of the sedative solution of opium will always prove sufficient. When afterpains continue very severe for some time after labour, your best plan of treatment will be to give the customary dose of castor oil a little earlier than usual; you will generally find that this will relieve the pains on bringing away a quantity of fecal matter. When the pains continue very severe in spite of this treatment, you will, as I have before said, suspect the presence of inflammatory action, and you will act accordingly.

I now come, gentlemen, to the consideration of the mechanism of parturition—a part of my subject which it is of the utmost importance for you to understand fully and clearly, as without it you will find yourselves at sea completely when you come to practise the art of midwifery, and upon the accuracy of your knowledge and the clearness of your comprehension of it much of your success in after-life will depend.

Previously to entering on the mechanism of parturition, properly so called, or the passage of the child through the pelvis of its mother, it is necessary for me to describe the pelvis to you; and, first of all, I shall mention to you the differences between the male pelvis and that of the female. You will perceive, gentlemen, that the male pelvis, which I now show you, has a narrow contracted brim, with the promontory of the sacrum projecting forwards very considerably; the whole contour of the brim, too, is quite different from the same part in the female pelvis, which I now hold in my hand. In the male you see the brim is round; in the female, on the contrary, you perceive it is oval. You see, too, in this, the female pelvis, that the promontory of the sacrum does not project nearly so much as it does in the male. In the male the ossa ilii are placed more vertically; whereas, in the female, they are more expanded, and not so deep. This difference in the formation of the iliac bones is of considerable importance, as, from their width in the female, they tend to support and protect the gravid uterus. You perceive that the pelvis of the two sexes differs much also in its cavity: that of the male pelvis being deep, that of the female shallow, more approaching to a ring of bone. This distinction is very evident at the symphysis of the pubes, the depth of which in the male is generally about an inch and a half, whereas, in the female, it seldom exceeds three quarters of an inch. This difference in depth is of considerable importance when considered in relation to parturition. The less the pelvis is in depth the less will be the surface on which the pressure of the child's head is exerted, and, therefore, the less will be the resistance. The cavity of the pelvis is generally deeper in tall than in short women, and on this account, *cæteris paribus*, tall women generally have more tedious and difficult labours than short. The deep hollow of the sacrum in the female pelvis also materially assists in rendering parturition easy: it allows the head to descend without making the injurious pressure on the soft parts lining the pubic bones which it otherwise must produce; and this is particularly of importance with regard to the bladder, as its neck must suffer in all labours if the hollow of the sacrum did not receive the head in its transit, and relieve the anterior parts from its pressure. The obturator foramina and the ischiatic notches are larger in the female than in the male pelvis, and the bones of the female pelvis are generally slighter and less massive. You perceive that in the outlet of the pelvis the difference between the two sexes is very apparent, and in no part is this difference more evident than in the pubic arch. This arch, you perceive, in the male, is narrow, contracted, angular, and deep, and the edges of the rami of the pubic bones are sharp and distinctly defined; in the female, on the contrary, you perceive that the pubic arch is shallow, broad, and well rounded, and the edges of the rami are rounded off as it were. When I place these two pelves side by side you will see this contrast very strikingly, and it is even more marked in the recent pelvis on account of the additional difference between the sub-pubic ligaments. You will easily understand that this difference has a material effect in assisting the process of parturition. The tuberosities of the ischia, too, are smaller and much farther apart in the female pelvis than in that of the male; the coccyx is more moveable, and the sacro-ischiatic ligaments are longer, so that the coccyx can be forced backwards to a considerable extent.

It is of some importance for you to understand correctly the differences of the different diameters of the female pelvis, as without this knowledge you can never be perfectly acquainted with the mechanism of parturition—a good knowledge of which, gentlemen, I must repeat, is absolutely necessary in order that you should become successful obstetricians. The diameters of the brim, cavity, and outlet of the female pelvis may be given correctly enough, for all practical purposes, by measuring their dimensions in three different directions—1st, the straight, antero-posterior, or conjugate; 2d, the transverse; and 3d, the oblique. I will write these dimensions in a tabular form on the board, in order that I may the better explain them to you.

	Antero-posterior.	Transverse.	Right Oblique.	Left Oblique.
	Inches.	Inches.	Inches.	Inches.
Brim	4	5	4½	4½
Cavity ...	4	4	4½	
Outlet....	3½*	4	4½	

In the brim the antero-posterior, or straight diameter, is drawn from the promontory of the sacrum to the upper edge of the symphysis of the pubes. In the cavity this diameter is drawn from the middle of the hollow of the sacrum to the middle of the symphysis of the pubes; and at the outlet this diameter is taken from the point of the coccyx to the lower edge of the symphysis pubis. The transverse diameter at the brim is drawn from the centre of the linea ilio-pectinea of one side to the same point on the opposite side. In the cavity the measurement for this diameter is taken from opposite the lower edge of the acetabulum on one side to the corresponding point on the opposite side, and at the outlet it is measured from one tuberosity of the ischium to the other. The oblique diameters at the brim are drawn from one sacro-iliac synchondrosis to the opposite acetabulum; in the cavity from the centre of the free space formed by the sacro-ischiatic notch and ligaments on one side to the obturator foramen on the opposite side, and at the outlet from the middle of the lower edge of the sacro-sciatic ligament on one side to the point of union between the ischium and descending ramus of the pubes on the other. The oblique diameters are named right and left according to that sacro-iliac synchondrosis from which they are drawn. These dimensions may vary a few lines in different pelves; but, I believe, I need not trouble you with these variations, as I have given you the general diameters near enough for all practical purposes. The oblique diameters in the cavity of the pelvis have the advantage also of being lined by yielding substances, as they are bounded by the sacro-ischiatic ligaments posteriorly, and the obturator ligament anteriorly. You must bear in mind, gentlemen, that the dimensions I have given you are those of the skeleton pelvis, and that, of course, they vary much during life from the numbers I have written on the board. The great masses of the psoas and iliacus muscles fill up very much, to say nothing of the numerous smaller muscles and the different organs contained in the pelvis. These muscles, too, during parturition are thrown into violent action, and their bellies, of course, become swollen, so that during labour the transverse diameter, which in the dried pelvis is the longest, becomes actually one of the shortest. The oblique diameters, therefore, are, during life, the longest available for the passage of the head. We shall see the application of this fact by-and-by. Now, as regards the diameters of the fœtal head: a great many measurements are given in books—so many, indeed, as to be quite confusing—I shall give them to you in general terms. The transverse diameter is three inches and a half; the occipito-nasal, or great diameter, is four inches and a half; the perpendicular measurement is three inches and a half; and the occipito-mental five inches.

Little attention was paid to the mechanism of parturition until the latter part of the last century; before that the most gratuitous and incorrect assumptions were made respecting the manner in which the presenting part of the child enters and passes through the pelvis. And even up to the present time I am sorry to say, gentlemen, that these erroneous opinions are held by some persons, who, from their positions as lecturers and teachers of midwifery, possess ample opportunities of attaining more correct views. Because the occiput usually comes forwards during the passage of the head under the pubic arch, it has been assumed that the head takes this position on entering the pelvis; that is to say, that the long diameter of the head enters the pelvis in its antero-posterior diameter, which

* This diameter is increased during labour by bending back the coccyx to 4½ inches.

by a reference to the board you will see is the shortest diameter of the brim of the pelvis. Mauriceau, La Motte, Levret, Stein, &c., maintained this opinion. The first practitioner who attempted to rectify this great error was Sir Fielding Ould, physician to the Lying-in Hospital at Dublin. He published a treatise on midwifery in 1742, in which he stated that the head at the commencement of labour has its long diameter directed in the transverse diameter of the pelvis. Smellie, who published his work on midwifery in 1752, thought the same. Smellie differed from Ould, however, on one point. Ould had stated that the shoulders at the commencement of labour took the same direction as the head. Smellie maintained that the shoulders, until they entered the pelvis, had their transverse diameter parallel to the antero-posterior diameter of the pelvis. You will see, however, gentlemen, that although Ould and Smellie were nearer the truth with regard to the passage of the head, neither of them was exactly right. Up to 1770 nothing was known on this subject in France; but about this time Deleurie first published his "Traité des Accouchemens," in which he embraced Smellie's views entirely. This was the first change which took place in the ideas on this subject in France from the time of Mauriceau. In 1771 two authors published inaugural dissertations on this subject almost simultaneously, and certainly quite unknown to each other: one of these was by Matthias Saxtorph, of Copenhagen, and was entitled, "De diverso partu ob diversam capitis ad pelvim relationem mutuam;" the other was published at Paris by Solayres de Renhac, professor of medicine at the celebrated School of Montpellier, written on the occasion of his being admitted into the Royal College of Surgery. This dissertation was entitled, "De partu Viribus Maternis absoluto." Solayres, however, died immediately after its publication, and before he had been called on to defend his views. These two were the first authors who gave a correct description of the mode in which the child enters the pelvis, viz., with the sagittal suture parallel to the oblique diameter of the pelvis.

The famous Baudelocque translated Solayres de Renhac's treatise into his great work on midwifery, and Plenck has copied, without acknowledgment, Saxtorph's dissertation into his "Elementa Artis Obstetriciæ." All later writers on this part of the subject have been contented to copy Baudelocque.

At our next meeting, gentlemen, I shall describe to you the positions of the head.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XXI.

HERPES.

According to Willan and others.

	SPECIES.
Herpes	H. Phlyctænodes
	H. Zoster
	H. Circinatus
	H. Labialis
	H. Præputialis
	H. Iris

As proposed by Startin.

GENUS AND SPECIES.	DIVISIONS.	
HERPES		
H. Phlyctænodes	Localis	Sparsus
H. Iris vel versicolor		Confertus
H. Diutinus circinatus	Pluri-localis	Annulatus

GENTLEMEN,—Until the close of the last century the term *Herpes* (which is that affixed to the next cutaneous malady on which I am desirous of engaging your notice) was applied indiscriminately to nearly all eruptions of the skin, accompanied by scurfiness, vesicles, pustules, or eroding sores. This definition, it must be obvious, would include many diseases totally different in their origin, nature, and treatment. As usual, the great authority for the present application of the term is Willan, who, in this instance, has undoubtedly produced something like precision and order out of what, before he gave his time and attention to the subject, was inextricable confusion. Willan has limited the disease to a vesicular eruption, mostly of an evanescent nature, having a course or progress more closely resembling the true exanthemata, than any other chronic affections of the skin; that is to say, a period of seven to fourteen days is for the most part sufficient to comprehend the rise, maturity, and decline of the disease, whilst more or less constitutional disorder attends nearly every case, subsiding as the malady disappears. Herpes may, therefore, be defined to consist in a noncontagious cutaneous eruption of distinct vesicles, seldom larger than a small pea, which are filled with a watery fluid. These vesicles occur in groups, rings, or clusters, on an inflamed base, mostly extending a little beyond the seat of the eruption; the progress of the disease being attended by constitutional disorder, and usually terminating in a week or ten days by superficial scabbing, and more rarely by ulceration. The situation occupied by the vesicles of herpes, for the most part, will be found placed over a superficial nervous centre or ramification, which the disease follows in such a manner as to cover that portion of the side, or half of the body, or limb, to which the nerve is distributed, consequently much pain, smarting, and tingling are the usual symptoms attendant on the disease. Herpes, though a local disease, may be manifested on one or more parts of the body; and age, sex, or condition in life appear to exert no marked influence over its attacks. Some individuals would appear to be particularly liable to attacks of herpes, whilst others, even amongst members of the same family, under precisely the same circumstances, would seem to possess a species of immunity, as they are never sufferers from the complaint.

The contents of the vesicles, on their first appearance, are commonly clear like water, but become milky and opaque after a day or two, when they usually break, and sometimes discharge an abundance of this serosity. When this occurs, ulcerations are apt to follow, and the scabbing and healing process may be long delayed.

It will be perceived from the foregoing brief definition and description of this common disease, that it very much resembles pemphigus, already considered, and, indeed, I can discover no practical difference between one disease and the other—the greater extent of eczemation in pemphigus constituting a difference, without a distinction leading to any useful result. By examining the models before you, I think my remarks will appear still more reasonable, as the greater inflammation around the vesicles of herpes (forming a rose-coloured ground from which they spring), in reality, is the only visible difference between one affection and the other, when the eruptions are of corresponding magnitude. There is also a species of herpes not found in the authors I have consulted, and of this you have two examples on the table: this I have named on the chart *Herpes diutinus*; it seems to form the connecting link between Pemphigus diutinus, Herpes, and Eczema, if, indeed, the size of the vesicles would not refer it to the first-named complaint.

I have proposed to call this malady *Herpes diutinus circinatus*, from its very constantly remaining for a lengthened indefinite period, and appearing commonly in a circular figure; but I may refer you to the chart for the arrangement I propose adopting, which you may notice comprehends four species of herpes, which are similar to those of Willan, except the last: they are named H. Phlyctænodes, H. Zoster, H. Iris vel versicolor, and H. diutinus circinatus; the divisions of this species are local and variously placed, whilst the forms are scattered, grouped, and annular. Willan attached distinct names to the local divisions, which furnished additional species called, after the parts affected, *H. labialis*, *H. præputialis*, &c. &c.; these varieties are, in reality, Herples simplex, otherwise called phlyctænodes, affecting these portions of the body. I cannot think that it is necessary for me to describe at length each variety of herpes; yet, as the editor of the *Medical Times* does me the honour to print what I say, it may be well to make the subject complete by briefly recapitulating the chief characteristics.

H. Phlyctænodes or simplex may serve as an example for the whole group. It commonly commences after a few days' indisposition, first by pain and heat in the part about to be affected, which in an hour or two assumes a redder tint than the surrounding skin, and a sensation as though the part were excoriated is experienced. A few red spots now become visible, from eight to twenty in a cluster, which very speedily appear to be vesicles that in ten or twelve hours may attain the size of a small pea, the inflammation from which they spring extending a little beyond each cluster, as you will observe in the model I hand round. In a few days these vesicles break and shrivel up, leaving here and there a small loose scab or crust, which remains adherent for a short time and then falls, leaving a red mark on the skin, which lasts several days.

If the complaint be irritated or disturbed, it is apt to ulcerate and to be of longer duration. This elementary form of herpes may appear in succession on several parts of the body, but it is best known on the lips and prepuce, where, according to Willan's nomenclature, it is called *H. labialis* and H. præputialis. I may observe that when this herpes attacks the vicinity of any of the openings of the body, as the nose, the outside of the prepuce, &c., it is apt to extend within these parts, but I do not know that these migrations are of any practical importance.

H. Zoster, well known by the vulgar appellation of Shingles, is the most important and interesting of the genus under our consideration. Tradition or superstition has attached an importance to it which I cannot think it deserves, and a prejudice has existed, even since the days of Pliny,* who mentions the circumstance that in the event of shingles forming an entire zone round the body, the consequences will be inevitably fatal. When you remember what I have mentioned respecting the mode in which herpes follows the ramifications of some one particular nervous trunk supplying the skin of any part of the body (some as yet not understood irritation in which nerve being the probable cause of the complaint), you will perceive that, as all our nerves are double, it is unlikely the body can be encircled with herpes unless both nerves should be simultaneously disordered, and consequently, that it is prognosticating against a contingency, which is most improbable, if not impossible. Herpes zoster is very constantly preceded by two or three days indisposition, attended with feverishness and rheumatic pains, which are sometimes exceedingly severe in the part which becomes the future seat of the disease; an eruption of sundry red blotches, distributed in no regular order, next manifests itself on the side of the body, as for example on the abdomen, as witnessed in the model before you; or it commences at the median line either in front or behind, extending, as the nerves are known to do, very accurately over that half or side on which it commenced, reaching thus from the spine to the centre of the sternum, like a zone or belt, or rather a half zone or belt, whence its name, Zona or Zoster. Occasionally, also, the form of herpes follows the distribution of the superficial nerves on the limbs and other parts. In the example before you this was the case, the cutaneous nerves accompanying the superficial epigastric and external circumflex ilii arteries, which arise beneath Poupart's ligament from the femoral trunk, and supply the skin of the left hypogastric region, and the upper and outer part of the thigh, being the filaments which appear to have been concerned in the production of this shingles.

To proceed, however, with the description of herpes zoster, the red patches I have spoken of soon become vesicular, the vesicles having often a flattened appearance, and an arched figure like a small haricot bean (this is also observable on the models). In three, or at most four, days, the vesicles have a darker appearance, as though they contained a little bloody serum, which, indeed, is commonly the case before they break or become shrivelled up, when a slight encrustation occupies their place, and ultimately falls, leaving a red spot on the skin. The whole course of the malady is usually completed in a week or ten days. Herpes

* 1 Pliny, 2 Id.

iris or versicolor, the next species of the disease, very rarely witnessed; I may have seen it half dozen times: it is Herpes phlyctænodes occurring on a delicate florid skin, with the transparent vesicles so arranged as to reflect the light in prismatic colours like a rainbow. No practical importance attaches to this disease, which is a mere matter of curiosity and has served cutaneous delineators with an opportunity for exercising their predilection for vivid colours—a chance which, as regards this complaint, has never occurred to our modeller since his employment here.

Herpes diutinus circinatus, the name I have ventured to attach to a variety of herpes I have many times witnessed, which is exemplified by two models, commences, like the simple species, by a sudden eruption of vesicles in one or more parts of the body, their arrangement being very constantly annular (the *H. circinatus of Willan*). At first the disease appears to follow its ordinary course; but when in other species it should disappear, a second eruption of vesicles is manifested, and these are of a larger size, and occur a little beyond the boundary of the former circle, whilst the first site of the disease remains raw, and sometimes ulcerated. Vesicles at the same time are produced in the centre of the rays, and go through a similar process, until at last a round or oval vesicular, excoriated, and ulcerated patch is formed, often becoming as large as the palm of the hand; in short, the disease assumes the appearance the models represent, one of which is taken from the leg, the other from the arm of different patients. The head occasionally becomes the seat of this complaint, when it constitutes a variety of vesicular ringworm that is very troublesome and difficult of cure—the ordinary herpes circinatus of the scalp being amongst the most simple and readily alleviated of any of its affections. I beg, however, that you will observe the models of herpes diutinus circinatus, which, better than any descriptions, will render you familiar with it appearances. In so doing you will not fail to remark how closely it approximates in its appearance and nature to eczema figurata and pemphigus.

A few words only can be required on the treatment of the common forms of herpes; in fact, the less the complaint is interfered with, in ordinary cases, the better. I generally confine my recommendations to dusting the parts twice a day with hair powder, and directing a saline acidulated aperient, containing, when much pain accompanies the shingles, a few drops of the wine of colchicum.

In *Herpes labialis*, a lotion, containing a little borax, is often of use, and gentle purgatives are always expedient. The models of these diseases point out the appearances usually presented; and I shall not detain you longer on a subject so unimportant by a recital of cases, as the little medical management they may require must suggest itself to a tyro in the art of healing. I have found the variety, named herpes diutinus circinatus yield to the treatment recommended when speaking of eczema: in one of the examples on the table, the diseased patches had existed a year, and in the other from the arm, upwards of two years; they required about six weeks' treatment, local and constitutional, before they yielded, and a slight cicatrix remained on the spots they occupied.

When I treat of ulcers, I shall again have occasion to make mention of this species of herpes; and on a future occasion its complications with syphilis and scrofula will require especial mention; yet, before I conclude with this subject, it may be well to make an observation or two on *Herpes Præputialis*, which from its situation is very apt to be mistaken for another disease. I have known the peace of families destroyed, by this mistake, in more than one instance; whilst the unfortunate victim of the error has been treated with mercury, and what not, with a view of eradicating syphilis! If the poor wife should have leucorrhœa (which, I may observe, is nearly always the case, and, indeed, seems to be the common cause of this herpes in the male), the supposition of a syphilitic origin of the excoriations or ulcerations becomes verified, and she, too, becomes a martyr to the mistake. A train of evils thus commences, which all medical efforts, however well directed, very commonly fail to check, until a serious state of things is created. The well-known remarks, on what he termed pseudo-syphilis, of my friend and teacher the late John Abernethy will recal many of these cases to the recollection of those familiar with his writings or lectures, as he paints in never-to-be-forgotten colours the symptoms and treatment of these often afflictive cases. I should advise you in all instances of doubt to give the unfortunate patient the benefit of the doubt, not only in the disease under our consideration, but whenever your opinion is called for by a public or private tribunal, or any professional circumstance which may destroy the peace or happiness of a fellow-creature. I am induced to dwell on this point, at this moment, from the fact that last week only the circumstance I have supposed was actually presented to my notice. A highly respectable and talented barrister posted from a midland town with these suspicious appearances on his prepuce and glans penis. He had consulted several practitioners, and had been led to believe that he must either have contracted syphilis, or that the secondary appearances of this disease, for which he had taken mercury in his youth, were now manifesting themselves, to embitter and destroy his matrimonial happiness. He was again taking mercurials, and had made up his mind for the worst. I examined the parts with care, and listened to his recital, when I was happy to assure him that the offensive discharges, the small ulcerations covered with white coagulable lymph, and the burning heat and irritation in the part of which he complained, were the usual symptoms of herpes præputialis, and that, as the eruption had existed a week, the use of a little mild black wash, and an antacid aperient, would suffice to make him well in a few days. I need scarcely assure you that my prognostication was verified, and it brought this conviction to the mind of my patient, that, on the former occasion, when he had been salivated for syphilis, his complaint was identical with the one from which he had now recovered. I propose next week, gentlemen, to consider the affection of the skin termed *Aptha*, and to furnish you with a brief recapitulation of the diseases heretofore considered, so as to give you an insight into the reasons for the order observed as regards their description, before I commence the detail of what may be termed a *new series* of these complaints, not having the characteristics of discharges or encrustations as their usual attendants, which, as you will have remarked, has been the case in every instance we have at present reviewed.

ORIGINAL CONTRIBUTIONS.

THE NERVES OF THE UTERUS.

By T. SNOW BECK, Esq.

[To the Editor of the Medical Times.]

SIR,—By the letter from Dr. Knox, which appears in your number for August 15, it might be supposed that the observations made by that gentleman, after an examination of my dissections, were published by Dr Robert Lee, in consequence of a letter which I had previously published. The facts, however, are as follows:—Dr. Robert Lee published, in the "Literary Gazette" for May 2, what purported to be a short account of Dr. Knox's interview with me. This I considered a very erroneous statement of what had occurred, and I wrote a letter in the next number of the same journal for May 9, with the view of correcting the mistake. This letter of mine was followed by a more lengthened account of Dr. K.'s observations, which I declined answering at that time, feeling that it was most unfair and unscientific to commence the discussion of a subject which had not appeared before the profession.

After the lapse of three months and a half from the time at which Dr. Knox examined the dissections, and while the paper was yet unpublished, Dr. K. observes—"But perhaps it is right that I should notice this (Mr. Beck's) letter *now, when all the circumstances are fresh in my memory*." Dr. K. also says that my letter "may be true, and probably is quite true, but it does not contain the whole truth." Yet, before saying this, Dr. Knox ought to have remembered that the letter was only intended to answer the points spoken of in the first report of his remarks (May 2). However, as the number of the "Philosophical Transactions" which contains my paper "On the Nerves of the Uterus" has now been published, I will examine the objections contained in Dr. Knox's letter in your journal for August 15, and in Dr. Lee's report printed in the "Literary Gazette" of May 16.

I think the chief of the objections may be arranged under the following heads:—

1. The removal of the sheath of the nerves.
2. The small number of nerves which accompany the arteries.
3. The peculiar character of the pelvic plexus.
4. The condition of a long nerve which runs up by the side of the uterus.
5. The occurrence of divided ends of supposed nerves in the tissues of the uterus; and
6. The large amount of nerves on the vagina when compared with those sent to the uterus.

1. The removal of the sheath.

This, Dr. Knox observes, is "Mr. Beck's peculiar and unwarrantable mode of conducting the dissection. Mr. Fergusson agreed with me, that when we begin to open the sheaths of nerves, especially those of the sympathetic and its ganglia, the destruction of a great part of the nerves and ganglia must be inevitable."

"The dissections of Scarpa, Walter, Lobstein, and all anatomists, might be objected to, if the sheaths of the nerves are once touched."—*Literary Gazette*, May 16.

"By opening the sheaths of the nerves to such an extent as Mr. Beck has done, the nervous character is apt to disappear and to be confounded with the cellular tissue; under this mode of dissection ganglions assume a new form, the grey matter is scraped away, and what appeared a single ganglion becomes a group of ganglions marked by plexuses of a peculiar character, and such as I had not seen before."

"Mr. Beck and his friends attach much importance to the opening up of the sheaths of the nerves, separating the component fibrils, dissecting the ganglions so deeply as to remove in as far as possible all that is not nervous matter. Now, there can be no objection to this as an object of close inquiry; but, in the first place, the method is *far from novel*; and, in the second place, it is difficult to see where it is to end."—*Medical Times*, Aug. 15.

It would thus appear that Dr. Knox is not very decided in his opinion as to what has been done, or what ought to be done, with the sheath that surrounds the nerves. He first says that to remove it is "Mr. Beck's peculiar and unwarrantable mode of conducting the dissection"; and afterwards, that "there can be no objection to this as an object of close inquiry; but in the first place the method is *far from novel*."

He next says that the sheath must not be touched; for "when we begin to open the sheaths, the destruction of a great part of the nerves and ganglia must be inevitable"; and then leaves one to infer that it may be partially removed, but if "*to such an extent* as Mr. Beck has done, the nervous character is apt to disappear, and to be confounded with the cellular tissue." Now, either it must be touched, or it must not be touched; but which course is to be followed does not appear from Dr. Knox's observations. But suppose the sheath may be touched, the phrase "*to such an extent*" is very indefinite. How much is to be removed? One quarter? one third? one half? or how much? For it must be evident that, unless some definite rule be followed, no two dissections will be alike. We may make the nerves larger or smaller, *ad libitum*, by removing the quarter or the half of the sheath. Further, Dr. Knox is greatly in error by supposing that "when we begin to open the sheaths the destruction of a great part of the nerves and ganglia must be inevitable"; for the whole of the fibro-cellular sheath may be entirely removed without the nervous structure being exposed, much less injured. The fibro-cellular sheath which surrounds the nerves serves two chief offices—one of protection, and the other as a support for the capillary network of blood vessels which supplies the nerves. But inter-

posed between this sheath and the nerve is a delicate membrane, with the free surface next to the nervous tubules. Now, the whole of the fibro-cellular sheath, including the minute bloodvessels, may be removed, and this membrane will remain, enclosing the nerve and protecting it from injury. Again, no one could commit a greater anatomical mistake than by saying that, if the sheath of the nerves be removed, "the nervous character is apt to disappear, and to be confounded with the cellular tissue." The truth is exactly the reverse; for with a small nerve the fibro-cellular sheath becomes confounded with the cellular tissue of the organ; and the only means by which a nerve can be kept distinct is by removing the sheath, and leaving it surrounded by the delicate membrane before alluded to. By this means I have traced branches which measured from the 500th to the 600th part of an inch in diameter: when smaller than this they become objects for the compound microscope. These errors of Dr. Knox are only equalled by his statement that the "grey matter is scraped away, and what appeared a single ganglion becomes a group of ganglions. Surely it is exceedingly easy to know when any grey matter has been scraped away from a ganglion, for, when such has been done, the ganglion loses the rounded perfect appearance which nature gives it, and is left with sharp and strongly-defined edges. Nor can the utmost art conceal the marks of the scalpel, or of the needle, which has been used to scrape away the grey matter. The delicate membrane which immediately invests the nerves also surrounds the ganglia, and equally allows the whole of the fibro-cellular sheath to be removed without any injury being done to them.

The remaining objection, "that the dissections of Scarpa, Walter, Lobstein, and all anatomists, might be objected to if the sheaths of nerves be once touched," is puerile in the extreme; for, however much we may venerate the names of these great and distinguished anatomists, the time is passed for being blinded by the weight of authority. The question at present is,—Ought the fibro-cellular sheath to be removed or not? and if it ought, can it be removed without injury to the nerve? Both these questions I unhesitatingly answer in the affirmative.

2. The small size of the nerves which accompany the arteries.

"I was not prepared for the fact, that few or none follow the vessels, that seem to me to be the result of his dissection."—*Literary Gazette*, May 16.

"I remarked to Mr. Beck, that the *scarcity of nerves* in his dissection, following the course of the arteries or vessels, surprised me."—*Medical Times*, Aug. 15.

By a mode of dissection which Dr. Knox appears to approve of, both the arteries and nerves are allowed to remain covered with much cellular tissue, which hangs loose in the preparation as flocculent matter. Small cords pass through this flocculent matter, and extend between the vessels and the nerves. These cords have sometimes been considered, and appear to be considered by Dr. Knox, as nerves passing to the vessels; whilst really they are vessels passing to the nerves, and ramifying in the fibro-cellular sheath. "Before the nerves were cleared from their neurilema, I frequently met with what appeared to be nervous branches distributed to the arteries; but in every instance I have been able, by the aid of the microscope, satisfactorily to ascertain that these were minute vessels passing from the artery to the nerve to ramify in its neurilema, and not branches of the nerve going to the artery".—*Philos. Trans.* for 1846, page 220.

By the same mode of dissection, the nerves are not followed so far in their course as I have dissected them. The larger nerves are seen to mix with the vessels, and it is concluded they follow the course of the arteries; but they only accompany them for a short way, and ultimately separate from them to be separately distributed to the organ. In my dissections the nerves have been traced beyond the point where they are in company with the arteries, and the vessels have been carefully removed to make the dissection of the nerves less complicated. "These nerves pass towards the uterus, and, mixing with the arteries of the part, go on in company with them for some part of their course; but as they approach the body of the organ they separate, and each pursue a separate distribution."—*Phil. Trans.*, p. 219.

Independently, however, of these nerves, which are distributed to the body of the organ, and whose larger trunks accompany the arteries for some way, there exists another set, which especially accompanies the vessels, and appears to be distributed to them. And whilst the nerves which supply the body of the organ "lose the plexiform character, and form a number of delicate branches, which pass on as distinct fine chords dividing and subdividing, but not uniting with each other,"—(*Phil. Trans.*, p. 219), the nerves accompanying the arteries "assume a plexiform arrangement round the vessels, and have the distinctive character of forming minute ganglia here and there. *Phil. Trans.*, p. 219.

3. The peculiar character of the pelvic plexus.

"I pointed out to Mr. Bowman (says Dr. Knox) that the plexus at the neck of the gravid uterus was unlike any nervous plexus found in the human body, or in the bodies of any of the lower animals, and remarked that I had never seen such a plexus before. It is an unknown and extraordinary form of plexus, perfectly anomalous, so that it is impossible to guess at its object."—*Literary Gazette*, May 15. "For he (Mr. Beck) observed to me that these were very peculiar, and 'unlike what occurred in other parts of the body'; perhaps I ought to have said that to me they did not seem to be plexuses at all."—*Medical Times*, August 15.

The plexus which is situated on the side of the vagina is so very peculiar, and "unlike what occurs in other parts of the body," that I have ventured to mark this peculiarity by giving it a distinct name—the pelvic plexus. To explain this fully would involve a lengthened description. The larger branches of the sympathetic nerve are well known to be composed of gelatinous and tubular nervous fibres. The tubular fibres are traced through the ganglia, and found to be derived equally from the motor and sensitive roots of the spinal nerves, whilst the gelatinous fibres are derived from the different sympathetic ganglia. Therefore, in nerves composed of these two kinds of fibres, there must be some point where they undergo the due mixture required for the different viscera to which they are distributed. And these points in the abdomen are at the semilunar ganglion, at the superior aortic plexus, and at the pelvic plexus. Thus the pelvic plexus is "unlike what occurs in other parts of the body," and its peculiarity is further shown by the following description:—

"The lower part of the lateral hypogastric plexus forms a continuous plexus with the pelvic plexus; and the only circumstance which marks the division between the two is the existence of small ganglia, and the junction of the branches from the sacral nerves. It appears, however, from the marked difference which exists in their constitution, necessary to make this distinction between the two plexuses. For whilst the lateral hypogastric plexus is a continuation of branches from the lower part of the superior aortic plexus, the pelvic plexus is a point where a new arrangement of the gelatinous and tubular nervous fibres occurs, previous to the branches being distributed to the bladder, vagina, and rectum. In this respect the pelvic plexus is analogous to the semilunar ganglion and to the lower part of the superior aortic plexus, from which it differs in the amount of nerves sent from it, and the large amounts of tubular fibres which these nerves contain."—*Phil. Trans.*, p. 232.

4. The condition of the long nerve which runs up by the side of the uterus to supply the portion immediately below the insertion of the fallopian tubes.

"You (Mr. B.) called my (Dr. K.) attention especially *to a remarkable long nerve* running down the front of the uterus, the course and presence of which rendered, in your opinion, the great portion of Dr. Lee's dissection doubtful. It sent off, you thought, no branches; it received, in your opinion, no communicating filamens throughout its length and course."

1. I remarked to you that this nerve was not of uniform strength, *but tapered*; but nerves which *taper* give off branches; *ergo*, this nerve must have given off branches originally, but no such are now to be seen; *ergo*, they must have been cut away.

2. I next remarked to you that it *tapered* unequally, that is, that it must have given off nervous filaments and received others. I showed you *two branches*, which must have been *cut across* during the dissection; the portions were still left attached to the pretended *long nerve*.

3. I soon after showed you two other branches which had been cut during the dissection; fancying that you were not so fully satisfied with them, I took the liberty of showing you that the nerve varied in thickness at these *additional points*, and that filaments lay beneath corresponding to the divided branches."—*Med. Times*, Aug. 15.

This nerve is figured in plate 14, No. 7.

1. That it tapers and gives off branches is very evident, as shown in the drawing; and that some of these branches have been divided, is also evident, as one of these divided branches, and one which Dr. Knox found, is represented in the plate at No. 8. Now, between this branch (No. 8) and the pelvic plexus, situated lower down, Dr. Knox also found a very delicate filament, which was not visible to the unassisted eye, and which the artist has not figured. It has never been concealed that some branches have been divided in the course of the dissection. But a few branches being divided does not invalidate the general truth of the dissection; more especially *when confirmed by another preparation, in which these divided branches do not occur.* The chief point at issue is not whether one or two nervous filaments distributed to the body of the uterus, and which measure about 1-200 of an inch in diameter, have been divided; but whether the small amount of nerves sent to the uterus be the true condition; or, whether, as stated in Dr. Lee's papers, the great nervous webs, "ganglia and plexuses," which cover the whole of the anterior and posterior surfaces of the uterus, "as high as the fundus," be the correct statement of the fact.

2. That it tapers unequally, *i.e.*, that it must have given off nervous filaments and received others. To the unassisted eye the nerve appears to taper unequally, but it will scarcely be believed that this unequal tapering depends upon the sheath being entirely removed in some parts, and only partially removed in others. That the thickened portion of the nerve, where Dr. Knox thinks it receives nervous filaments, does not depend upon any increase of nervous matter, but upon a portion of the sheath being left surrounding it. The course of this nerve is peculiar, and the nerve itself delicate, for which reasons I was not particular in removing the sheath from it in its entire course, lest, in doing so, it should receive any injury. But I remained content with showing the size of the branch at different points, and have to regret that the remaining sheath should have led Dr. Knox into error. Yet, had Dr. K. used a lens of sufficient power, the cause of this unequal tapering would have been readily recognised. The *two branches* spoken of have been noticed before.

3. "Two other branches which had been cut," and "that the nerve varied in thickness at these additional points." I am not aware of any more divided filaments on the long nerve than the two already mentioned. Nor is there any other varying in thickness except that caused by the sheath being either entirely or partially removed. Yet, lest I may be mistaken in the parts which Dr. Knox refers to, I shall be very glad to have it more specially pointed out in the drawings, or shown in the dissection.

"That filaments lay beneath corresponding to the divided branches" of nerve, is a great mistake of Dr. Knox. There are the ends of divided filaments lying beneath the nerve; but these filaments *do not correspond with the divided nervous filaments; nor are they nervous, but muscular, filaments.* It was to remove this doubt that I asked Dr. Knox to submit them to the compound microscope. But it appears he did not understand the motive of my request. Where the tissue of the uterus has been cut into, in dissecting the nerves,

the divided ends of fine cords of involuntary muscle are shown. It is these fine cords which Dr. Knox has mistaken for nerves, and which I would be unable to state the nature of, if I had not examined them with the compound microscope.

5. The occurrence of divided ends of supposed nerves in the tissues of the uterus.

"The tissues of the uterus had been but little opened into by Mr. Beck. When separated somewhat by myself numerous filaments might be seen which much experience convinced me were nerves. Mr. Beck's offer to submit any portion of these filaments to high microscopes I declined. For this there could be no occasion, with structures which I could make out, either with the unaided sight, or with the very feeble hand-glass you saw me use."—*Med. Times*, Aug. 15.

Upon taking up this long nerve with the forceps, I saw the ends of several branches proceeding from it which had been cut across. The cut ends were still hanging from the nerve. The corresponding cut ends lay in the tissue below, and could be raised up with the forceps, which I did. Upon looking up these cut ends I saw numerous filaments of nerves in the tissue below, and in the line of the vessels; and I told Mr. Bowman and Mr. Beck that I was satisfied they were nerves, and pretty large ones too; and that the nerves cut across led to plexuses of nerves amongst the plions (?) and vascular tissues of the uterus."—*Lit. Gazette*, May 16.

The divided ends hanging from the long nerve have been already mentioned: they are two in number. And, "upon taking up these cut ends, I saw (says Dr. K.) numerous filaments of nerves in the tissues below, and in the line of the vessels." Now, here Dr. Knox is again in error, for the filaments which he saw are not nervous filaments, but muscular. And, so far from the tissues having "been but little opened into by Mr. Beck," they have been cut into in several places, and in some to the depth of three fourths of an inch. Had Dr. K. submitted these filaments to the microscope he would have found that which appeared nerves "with the unaided sight, or with the very feeble hand-glass," were, in fact, small cords of the muscular tissue of the uterus. And, so far from there being "no occasion" for this test, there appears to have been every occasion. That these filaments "cut across led to plexuses amongst the tissues of the uterus" is evident, but the plexuses are muscular, and not nervous.

6. The large amount of nerves on the vagina when compared with those sent to the uterus.

Dr. Knox says—"I called Mr. Bowman's attention to the vast amount of nerves upon the upper part of the vagina, or where the uterus and vagina unite, which threw a doubt on my mind on the correctness of all the other parts of Mr. Beck's dissections, not disbelieving that what were shown me were really nerves, but believing that only a very small part of the nerves of the uterus were shown. The nerves of the vagina and those of the uterus form a striking counterpart to one another."—*Lit. Gazette*, May 16.

In making these observations Dr. Knox has forgot to separate the nerves distributed to an organ from a plexus which lies by the side of it. The pelvic plexus lying by the side of the vagina, and which forms "the vast amount of nerves upon the upper part of the vagina," sends large branches to the bladder, the erectile tissue at the anterior part of the vagina, and branches to the rectum; but a comparatively small quantity are distributed to the vagina. It might as well be said that the scaleni muscles are largely supplied with nerves because the brachial plexus lies between them, as that the vagina receives numerous nerves because the pelvic plexus lies by the side of it.

If I have not answered all the objections made by Dr. Knox, I hope it will not be said that this letter "does not contain the whole truth," for I have answered those objections which appear to me the most important, and, should it be considered requisite to notice the remainder, I am ready to do so. As, in many parts of this letter, my opinion stands in direct opposition to that of Dr. Knox, I can only appeal to another examination of the preparations in order to decide who is correct. I cannot quit this part of the subject without expressing my regrets on two points of Dr. Knox's letter—viz., that he should have considered it necessary to insinuate that I left the room during his visit because I thought I had lost Mr. Bowman's "support on a most important point." Dr. Knox has thought right to assign this motive for my temporary absence, which was caused by professional business, without having made inquiry into the real cause; and in doing so he, I think, has shown a spirit which is neither friendly nor candid. If, without previous acquaintance, he attributes a motive personally disparaging towards me, to a professional act of mine, without taking means, which were at hand, to ascertain the truth, how can I expect of him candour or fair examination when more important matters are concerned? Dr. Knox next repeats the insinuation that I was instigated by some members of the Physiological Committee to commence the inquiry "for the purpose of injuring Dr. Lee's reputation." He avers that he entertains this belief. Yet I, who know the facts, give it my most most unqualified contradiction. He came to my house with this impression on his mind. Is it, then, to be considered that he came as an impartial observer to ascertain the truth? He, moreover, seeks to implicate the names of gentlemen of high character. Surely the scientific question is one which would bear being examined without the admixture of such topics in the inquiry—a course which can have no other effect than that of producing irritation, and, probably, shutting the real question from view. To say the least, such matter is irrelevant when questions of fact in anatomy are alone concerned.

I remain, Sir, your obedient servant,

T. SNOW BECK.

AFFECTION OF THE BRAIN FROM EXCESSIVE HEAT CAUSING TEMPORARY INSANITY.

By THOMAS SMITH, Esq. King's College Hospital.

CASE 1. On Sunday last, August 2nd about 2 p.m., I accidentally called upon a medical friend of mine, who had gone into the country, and was requested by his lady to see his apprentice, a young gentleman aged 18, as he had two or three minutes before my arrival been taken very ill. On entering the bed room, I found him leaning on the back of a chair, burying his head and face between his arms, on speaking to him, I could obtain no answer; and on my attempting to hold up his head, he became very violent, struggling to get away from me, and attempting to bite me. His head, which is very large, was hot, the pupils moderately dilated, the pulse about 90. With great difficulty I laid him on the bed, and bound his arms and legs together with towels; whilst doing this he was most furious, he bit his own hands, and anything he could lay hold of, such as the pillow, or the mattress; tore off the bonds from his wrists by his teeth, and got off the bed once or twice. Having so secured him that he could not well get away from me, I poured some jugfuls of cold water, from a height upon his head. This had an instantaneous effect, he became sensible, knew me, and complained of my wetting him so much. In a few minutes however, his eyes became fixed, he did not answer me when I spoke to him, and he appeared to be relapsing into a state of insensibility. I applied the cold water again vigorously, which had the effect of restoring perfect consciousness, he complained of pain and heaviness in his head, which was hot. His face was flushed, pulse full and firm, about 90. I immediately took ten ounces of blood from him, whilst sitting up in bed; this measure gave him marked relief, the uneasy sensation in his head became less, and the pulse became fuller than it was before. He talked cheerfully to me, and became quite quiet. I gave him Calomel gr v. to be followed by ℥ss. mag. sulph.; applied cold to the head, and desired that he might be kept perfectly quiet.

10 p.m. On calling again, I found him a good deal excited; he talked rather wildly, and was very obstinate. I learnt, that since the bleeding he had been so well, that he got out bed and put some his clothes on, asked for a book to read and when the medicine began to disturb his bowels, he walked out into a passage to the watercloset; he had taken some tea, and was very well, until late in the evening. As he had had no sleep, I measured out twenty-two drops of tinct Opii—and with great difficulty prevailed upon him to take it. I stayed by his bed-side to watch the effect. It was decidedly unfavourable, for he became more excited, complaining of a feeling as though he was tipsy. Hoping that the laudanum might quiet him, I did nothing else, but he soon became very nearly as bad as when I first saw him; he got out of bed; threw off the cold rags from his head; and became very unmanageable; sitting up in his bed, staring wildly, and pointing with his finger, at imaginary objects. I again applied cold water in large quantities to the head, with good effect. He became more calm, called me by my name, and from that time remained more quiet, although he was not perfectly sensible until past twelve. He had not passed any water for eight or ten hours.

Monday August 3. He slept after I had left him. Feels pretty comfortable this morning, complains of some pain in the head, is quite conscious, pulse 60 regular and firm. To take a small dose of mag. sulph. during the day, and to be kept quite quiet.

Tue day.—My friend when he returned from the country, ordered him some tartar emetic which had made him rather sick. He sat up to day, and eat some meat. This evening he was very much excited again, but he is now sensible. I advised five grains of calomel to be given, and perfect quiet to be observed.

Wednesday. Is much better, has had no retur of the symptoms, bowels are well opened, he is sitting up in an easy chair, the chief thing he complains of is weakness.

Sunday Aug 9th.—This young gentleman is quite well, and is now able to attend to his duties—

The following is the history I obtained: —On the Saturday previous to my seeing him, which day will be remembered as being the hottest day this summer; he went into the city, and ran very fast; being excessively hot, he took one small glass of ale at a friend's house, and then set off to return. He felt the heat very much. Before he had gone very far, the violent thunder storm commenced suddenly. He placed himself under a doorway, and from that moment, he lost recollection, and how he got home he cannot tell. When he arrived, the people in the house noticed him to be very peculiar in his manner; he threw a footstool at the wife of my friend, and did other eccentricities. He was put on the bed, and then became violent and excited. My friend saw him, and prescribed tartar emetic, and a purgative. He seemed better afterwards. Next morning he was very unwell, he had had no sleep during the night and complained of his head, he ate some dinner in the middle of the day, and soon afterwards fell into the state in which I saw him.

For the notes of the next case, I am indebted to my friend and late fellow student. Mr. Peter Duncan, with whom I saw the patient once or twice, and to whose discrimination and judgment, was due the proper diagnosis and success of the affection, as it had been mistaken the chorea by one gentlemen before Mr. Duncan took it into his hands.—

CASE 2.

A young healthy lad aged 15, remained in a public tepid bath during five hours on Sunday, the 26th of July. Occasionally he dived off a considerable elevation, and on arising to the surface, was exposed to the rays of the sun, whose effects were enhanced by a skylight. On leaving the bath, he complained of great lassitude and pain in the upper part of his head, he reached home with difficulty, and passed a sleepless night.—

Monday. He walked up Regent street to the

Park, and was exposed to the sun for several hours, complaining much of headache, he went to bathe, but as he was about to undress, he became delirious. His mother thinking him unwell, took him to a surgeon, who gave him a cathartic and advised quietude.

Tuesday. After a restless night he went out, but on account of his mischievous propensities was obliged to be sent home. Slight restraint rendered him quite maniacal, attacking those around him, and breaking whatever came in his way. His medical adviser was kind enough to send him to me as a case worthy of notice. I saw him on Wednesday evening, he seemed to sit uneasily, his eyes constantly wandered; when anything near struck his view, it was seized and if in his power destroyed, suddenly he would drop his head and appear sleepy, a moment after, jumping up he would commit some unaccountable absurdity. He appeared to have a great dislike to speak or to be in any way disturbed. His special senses were acute—eyes suffused, pupils dilated, and features contracted; tongue red and tremulous—skin hot, pulse 120—tolerably strong no cough or abnormal sound in the chest bowels not opened since Saturday—urine scanty,—highly coloured. Ordered head to be shaved and kept high. Diet of the simplest kind.

R. Hyd. chloridi, pul. ipecac. aa gr. v. statim, sumend. et cras mane rep.

Thursday—Passed a sleepless night and is in much the same state. Bowels open, Pulse 120. Urine still scanty.

R, Ant. pot. tart gr. iss.; Tinc opii. m. v. aquæ ℥j - 3 tis horis.

After two doses he became calmer, the third induced sleep

Friday.—Has slept five hours, is more rational and quiet. Skin perspiring, urine much increased in quantity, bowels open, pulse 90. To go on with his medicine and to have beef tea.—His delirium left him in the afternoon, and he fell into a sound sleep, which lasted till early on Saturday morning.

Saturday. Awoke much refreshed, intellect still slightly confused, recollects none of the incidents of the past week, eyes natural, pulse 72 — Pupils slightly contracted, pain in head gone, to have a mutton chop, omit one grain of the tartar emetic.

Sunday. Has slept well, wishes to get up as he is free from pain, is quite rational, cannot believe that a week has elapsed since he has been taken ill, discontinues all medicine.

Monday. Convalescent.

My object in publishing these cases, is to put on record two cases of an affection which is generally rare in this country; but I should think many such cases must have fallen under the notice of the profession this summer, which has been remarkable for the extreme and constant heat. The two cases will be found similar in several respects; although the excitement in the first case amounted to a state of furious mania, whilst in Mr. Duncan's case, the symptoms at times were those of a person labouring under idiotcy; in fact, in both cases the symptoms indicated an excited sensibility of the brain, and the remedies used in both cases, had a tendency to tranquillize the brain. Affusion of cold in the first case, applied frequently and vigorously, was the successful remedy; in the second case, tartar emetic and opium, which every well-informed practitioner now knows to be so useful, in most cases of excited sensibility of the nervous system, overcame the symptoms, and I particularly wish to draw attention to the large dose of tartar emetic which the patient was able to bear without vomiting—sleep having been produced after three doses, and the delirium having ceased after its administration —shewed its great utility in the present case.

The Academy of Sciences of Toulouse has proposed as a prize subject for their gold medal, "The nature and true seat of lead colic; the signs by which it may be diagnosed from other intestinal affections; the curative indications which it presents, and the treatment likely to fulfil them.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

THIRD SERIES.

Reported by WILLIAM ANDERSON, Esq., Student at St. George's Hospital.

MEDICAL CASES.

SUBJECT—HYSTERIA.

CASE 1.—HYSTERIA.—Charlotte Atkins, aged twenty-five. Married.

Admitted May 21, 1845. Under Dr. Nairne.

Skin cool; tongue red and glazed; pulse 90, weak; urine free, pale-coloured, and voided in considerable quantities. Appetite bad, sometimes ravenous; catamenia regular; bowels irregular, sometimes confined, at others relaxed.

Complains of violent pain in the right side; shooting between the shoulders; shortness of breath; palpitation of the heart; has a dry, hacking cough, without expectoration; feels sick and faint after eating; is troubled with flatulence, giddiness, and heaviness of head, with occasional dimness of sight; there is pain in the left lumbar region, increased by pressure; she sleeps pretty well, but is low-spirited.

Says that she had a fall seven years ago, and "hurt herself over the left kidney"; for which she had, according to her own account, twenty-four blisters, and was only partially relieved; the pain is worse when the catemenia are present; her head and eyes have been affected for the last two or three years. To have broth diet.

℞. Haust. cinchonæ, ℥iss.

Acid. sulph. dil. m. x. bis die.

22. Pulse 108, small and weak. She *lies with* her legs drawn up, and complains of great pain in the abdomen, which is tympanitic; pain increased on *touching* the abdomen, but when her attention is drawn away she can bear pressure, and even allow the bowels to be squeezed in the hand, without showing any sign of pain; urine copious and pale. She is troubled with acid eructations. To have fish diet

℞. Pil. colocynth c. hyoscyami, gr. x. hac nocte.
Liquor calcis, mist. camphoræ, aa ℥ iv. ter die.

23. Symptoms much relieved; has no acid eructation; less flatulence; and no pain in abdomen.

24. Tongue clean; less red; less sickness; bowels open.

Rep. pil. alt. noct.

27. Better; less acidity of stomach and rising in the throat; still pain between the shoulders; tongue clean.

29. Appetite better; tongue clean; bowels open: still some heaviness in head and dimness of sight; feels very weak. Ordinary diet.

30. Still pain in the left side; sickness. Catap. sinapis, lat. sinist.

31. Pain relieved; no sickness; tongue clean; bowels very open.

June 3. Appetite better; no sickness; tongue clean; feels stronger. Discharged cured.

CASE 2.—PERITONITIS.—Ann Draper, aged fourteen. Laundress, single.

Transferred from Mr. Tatum to Dr. Nairne, May 15, 1845.

Admitted, April 23, for a severe strain of the left wrist; followed by synovial inflammation and ulceration of the cartilages.

At the present time the pulse is 120; skin warm and moist; bowels open from medicine; urine natural; tongue white in centre, moist at edges; papillæ prominent; catamenia have not yet appeared.

Great pain in the abdomen, increased by pressure; sickness and vomiting of bright green fluid this morning. These symptoms began in the night of the 12th instant, and were preceded by a rigor and pain in the head and legs.

The face is now flushed; countenance pinched; an eruption of red patches has appeared on the skin of the neck and chest, but has now disappeared; there is no sore throat. Fever diet.

℞. Haust. salin. efferv. ℥iss. 6tis horis.

16. More fever to-day; tongue coated and becoming dry; lips dry; eyes dull; more pain and tenderness of abdomen; pulse 120, very weak; bowels relaxed; complains of cough; and there is large crepitation heard between the scapulæ.

℞. Hyd. chloridi gr. ij. 6tis horis.

Has had a mustard poultice on, which for the time eased the pain in the abdomen. Rep. cat. sinapis.

17. Tongue rather cleaner and moist; pulse 108, stronger; complains of pain and great tenderness over the whole abdomen on pressure; bowels very much relaxed; motions watery and dark-coloured; has vomited three times this morning the same bright green-coloured fluid; there is great prostration of strength; she had an injection of starch and opium this morning, and turpentine fomentations to the abdomen, since which the bowels have not been so open; coughs more. Hirudines viij; abd. catap. Anthemidis. Rep. Haust. salin. et Hyd. chlorid.

18. Rather better; can bear more pressure on the abdomen; face not so much flushed; tongue cleaner. Pulse 108. Has vomited the green matter twice again; still complains of pain in the right hypochondrium, and much tenderness on pressure. Bowels opened only once since morning. Beef tea. Emp. Lyttæ. lat. abd. dext. Rep. Haust. salin. et Hyd. chlorid.

℞. Olei ricini, ℥ss. cras. si opus sit.

19. Bowels opened once since the oil; pain in abdomen not quite so violent; tongue cleaner; face flushes much at times; has vomited constantly the same matter as before. Soda-water.

20. Has been sick again this morning; pulse 120; bowels opened three times; motions lumpy; complains of a nasty taste in the mouth, and is very thirsty; tongue clean and moist; she lies on her back with her knees drawn up, which she says relieves the pain in the abdomen. There is still much tenderness over greater part of the abdomen on pressure.

℞. Haust. sennæ ℥iss. cras.

21. Face not so much flushed; still has constant vomiting; bowels very loose, motions thin; coughs; is very thirsty; tongue cleaner; pulse 108, rather firmer.

℞. Hydrarg. chloridi gr. iij. Opii gr. ss. ter die.

22. A little better; bowels less open; still sick, throwing up the same green matter; bears pressure on the abdomen better. To have an egg.

℞. Haust. sennæ, ℥iss. cras.

23. Weaker; still vomiting the same green matter; pulse 120; coughs very much; expectorates much; bowels open; abdomen tympanitic. Rep. pil. et Haust. salin. Vini rubri, ℥ss. ex aq.

24. Says she feels better; abdomen softer; bowels open, motions somewhat lumpy; pulse 108, soft; tongue white; still vomits.

25. The vomiting has ceased; there is a great deal of expectoration mixed with blood; bowels open; motions more solid. Arrow-root. Vin. rub. ℥iv.

26. Pulse 120; a little stronger; slept better; more cough and expectoration. Fish diet.

27. More sickness; coughs much; feels better; less pain in the abdomen; pulse 132, soft; crepitation at back part of both lungs.

28. Countenance much improved, has lost the flush; less pain on pressure over the abdomen; not so much cough; slight vomiting of half-digested food; pulse 120; bowels open; appetite better.

31. Not so well; more pain on pressure at umbilicus; vomiting continues; flushes at times; pulse 136, not so full; tongue brown; bowels very open; mouth sore; still expectorates mucus streaked with blood; no appetite. Cat. sinapis, epigast. Omit pil. To have arrow-root.

June 1. Much the same. Removed at the request of her friends.

CASE 3.—HYSTERIA.—Mary Ann Blake, aged nineteen, servant of all work. Admitted May 19, 1845, under Dr. Nairne. Skin warm; tongue moist and white; bowels confined; has difficulty at times in making water, which is clear, pale, and copious; catamenia regular; pulse 108; has thirst, and complains of pain in the side and pit of the stomach, and has shortness of breath on going up stairs; appetite bad. Ordinary diet. Has globus hystericus.

℞. Ext. colocynth, C. Ext. Hyoscyami, aa gr. v Pil. Galbani C. gr. v., omni nocte.

Haust. sennæ, ℥ iss cras, et rep. omn. alt man.

22. Much the same. P.

24. Catamenia adsunt. To leave off the pills for a few days.

27. Catamenia still present; has headache, and complains of beating at the head. Rep. pil.

℞ Haust. cinchonæ, ℥iss bis die.

29. Complains of pain in both sides of the thorax. Catap. sinapis. lateri utrique.

30. Still pain in sides. Rep. cat. sinapis.

31. Pain much relieved by poultice. P.

June 3. Feels better; appetite improved; tongue clean; wishes to go out. Dismissed cured.

Case 4.—Hysteria.—Sarah Porter, aged twenty-one, servant of all work. Admitted May 21, 1845, under Dr. Nairne. Skin cool; tongue clean and moist; complexion muddy; has pain in head and pit of the stomach; beating of the heart and globus hystericus; pulse 96. Catamenia per quatuor menses desunt. Ordinary diet.

℞. Inf. rosæ C. ℥iss. Magnes. sulph., ʒi. Acid. sulph. dil, *m.* x. ter die.

Pil aloes C. gr. x. h.n.

22. Bowels confined. H. sennæ ℥iss stat. Rep. pil. o.n.

24. Catamenia have appeared; feels better. Omit. med.

26. Catamenia still present; pulse weak.

℞ Mist. Ferri. C. ℥i. ter die.

29. Much the same. P.

July 3. Better. P.

7. More colour in face; feels better; sounds of heart loud and sharp, and a slight murmur heard with the first sound.

10. Getting stronger; tongue quite clean. Rep. mist. Ferri. C. ℥iss ter die.

12. Better; has more colour in face. P.

14. Better; medicine makes her sick. Omit. med.

17. Left cured.

Case 5.—Hysteria.—Eliza Simmonds, aged seventeen. Admitted May 21, 1845, under Dr. Nairne. Skin cold; tongue clean and moist; appetite good; complains of thirst; bowels open; sleeps well; catamenia regular; urine light-coloured and copious; complains of great weakness, with loss of power in the leg and arm of right side, and inability to walk without crutches; has a continual shaking, which came on about a year ago; has spasmodic contraction of the muscles about the left side of mouth, and complains of occasional shooting pains in the head; can stand on left leg. Says she had a fall a year ago and hurt her back, and has had issues in the back without relief. Ordinary diet.

℞. Haust. cinchonæ, ℥iss. Spir. ammon. aromat. *m.* xx. ter die.

℞. Pil. galbanii, C. Ext. colocynth. C. aa gr. v. O. N.

22. Back examined; can bear percussion on any part of it; spine perfectly straight; pulse weak; seems to have a want of will rather than of power, to get up and help the nurse and not remain idle.

24. Says she feels stronger, and does not shake so much. Pulse weak. P.

27. Much the same; has no want of power, being able to grasp things strongly with her right hand to save herself from falling; she can also stand upon the right leg when her attention is drawn off.

29. Feels stronger; bowels very open. Rep. pil hac nocte tantum.

31. Just the same. P.

June 3. No improvement; tongue clean; bowels open.

℞. Liq. calcis ʒxi. Tinct. Assafœtidæ, ʒi. ter die.

Rep. pil. o.n.

7. Much the same, with the exception of the face not being quite so much distorted.

12. Just the same; no improvement.

17. Feels heated, otherwise just the same. Balneum.

24. Just the same.

25. To go out.

Case 6.—Anasarca and Hemiplegia.—Laura Schmidt, aged thirty-two, married. Admitted April 29, 1845. Under Dr. Nairne. Tongue slightly furred, moist; pulse 120; appetite good; bowels open; catamenia regular; urine scanty and high-coloured, acid; there is great œdema of the lower extremities and swelling of the body. Complains of cough, shortness of breath, and has lost flesh for the last three months; has no violent pain; was confined last month. She is subject to a winter cough, and has palpitation of the heart.

The chest expands but very little; there is dulness under right scapula on percussion, and some crepitation at the lower part, in front; the respiration on both sides is coarse, and bronchial; dry rhonchus heard on both sides. During the last six months of pregnancy, she had general anasarca to a great extent, which all disappeared after delivery; there was considerable hemorrhage at the time of delivery; she did not suckle longer than a week.

There is increased impulse in the action of the heart, with an indistinct murmur over the aortic valves in the second sound. There appears to be considerable dilatation of this organ. Ordinary diet.

℞. Potassæ nitrat. gr. v. Spir. æther. nit., ʒi. Vin. ipecac. *m.* xx. Haust. pimentæ ʒx. ter die.

℞. Haust. morphia o. n.

30. Cough and expectoration much the same; countenance livid; copious deposit of lithates in the urine, first becoming clear, then thick again by heat.

℞. Antimon. pot. tart., gr. $\frac{1}{4}$. Potass. nitrat., gr. v. Spir. æther. nit., ʒi. Aq. menthæ virid., ʒix.

Emp. lyttæ int. scap. To have broth diet.

Olei ricini ℥ ss. stat. Omit. haust. morphiæ.

May 1. Had a fit at half-past three P.M. yesterday as she was going to the water-closet; she then fell on her face, and became perfectly insensible, with convulsions of the muscles on the right side of the face; there is now nearly total paralysis of the whole right side, and partial loss of sensation. The lips became blue during the fit, which was followed by frothing at the mouth and a deep sleep, which lasted some hours.

2. Bowels opened three or four times since the fit; œdema of legs and body somewhat diminished; pulse 120, very weak; respiration laborious; does not seem to suffer much pain, but is still nearly in a state of insensibility, and answers questions very indistinctly and with difficulty; urine very slightly albuminous and acid.

Rep. mist. sine antimon.

Spir. vini gallici, ℥ij.

3. She can move the finger and foot of right side a little, but complains of pain in the head; respiration still laboured, and much obstructed by mucus; answers questions slowly and imperfectly; pulse 120; right hand œdematous; eyes open, pupils dilated; bowels not open.

℞. Olei ricini, ʒ iij. statim.

5. Rather more sensible, and says she feels better; more motion of the right hand and arm, and some motion in the right leg; articulation improved; bowels not open yesterday; had some castor oil this morning, which has operated.

6. More motion in the arm; swellings less; bowels open.

8. Rather more strength in the right side; can it up better in bed, and feels better; speech improved, and more motion in the arm, which is swollen and œdematous; the face is drawn to the left side a little; urine scanty; bowels confined. Beef tea.

℞. Pulv. jalapæ C., ʒ ss., o. m.

10. Says she does not feel so well; her respiration is jerking and more difficult; lips and face more livid in colour; bowels opened three times since the powder; extremities cold.

12. Respiration very quick and laboured; lips more blue; urine scanty and high-coloured. Omit. pulv.

℞. Pil. digitalis C., gr. v., bis. die.

13. Skin over left hip has become red and tender from lying on it; left arm more swollen.

15. Respiration difficult; loud crepitation to be heard on both sides of the chest; pulse very weak; urine rather increased in quantity, and clearer. Spir. vini gallici, ℥iv. Light pudding.

17. Not so well, getting weaker, and makes less water, which is thick and high-coloured; respiration more laboured; lips more livid; pulse small and weak.

℞. Spir. æther. sulphur. c., *m.* xx. Spir. æther. nit., ʒi. Oxymel. scillæ, ʒi. Mist. camphoræ, ʒ ss., 6tis horis.

℞. Pil. colocynth C. hyoscyami, gr. x., o.a.n.

Omit. pil. digital. C.

20. Getting weaker; pulse 120; respiration difficult; coughs more; bowels open; great œdema of right arm and hand still.

22. More conscious, but passes her motions and urine under her; makes less water. Rep. mist. et pil.

24. Much the same; takes her nourishment; coughs, but has no power to expectorate.

27. Makes very little water, still passes her motions under her; bowels regular; appetite good; less swelling of arms and legs; still laborious breathing. Rep. mist.; Pil. digitalis C, gr. v., bis die.

29. Stronger; turns herself in bed; makes more water; face less swollen; appears now quite childish. Rep. pil.

℞. Spir. æther. nit., ʒi. Tinct. lyttæ, *m.* xxx. Spir. æther. s. c., *m.* xx. Mist. camphoræ, ʒx., ter die.

June 3. Makes more water, but still passes it unconsciously; face very purple; bowels confined.

℞. Pil. colocynth. C. hyoscyamo, gr. v., p.n.

5. Has fallen away much in the face and arms; has less cough; urine loaded with lithates.

7. Makes less water; gains strength; pulse 120; tongue clean.

10. Still very much swollen; more sensible; getting thinner; bowels confined. Rep. pil. col. C. hyoscy.

12. Sits up in bed; face less swollen; still considerable œdema of the legs; makes more water; no albumen in it, and it is very light-coloured.

14. Face less livid; the heart is heard over a larger surface; bowels open.

17. Legs less swollen; makes more water.

18. No albumen in urine; bowels very open; she is more sensible, and looks better.

24. Makes more water, motions still passed unconsciously.

26. Mouth sore. Omit. pil. digit. C.

28. Thinner; face more contracted.

July 3. Feels much better, bowels not open. Haust. sennæ, ℥iss. cras mane.

14. Urine still runs from her. She can now use her right arm a little.

17. Is troubled with cough. Haust. cetacei ℥iss. ter die loco mist.

19. Very drowsy; cough easier; large crepitation heard over both sides of chest.

22. More lively in manner, but the cough is very troublesome; legs much swollen.

26. Cough better; manner is childish.

29. Countenance more livid, legs more swollen, erythematous blush on each calf. Resumat usum mist. Maii 29th.

Aug. 2. Much the same. P.

4. Constant hacking cough; sleeps badly at night. Haust. morphiæ. o.n.

7. Abdomen more swollen; left arm œdematous; more childish in manner; urine albuminous.

13. More swollen; has great difficulty of breathing.

16. Rather more collected in manner.

19. Much the same.

23. No difference; sleeps from night draught.

26. Sleeps well at night. Omit. mist.

Sept. 2. Sank gradually, and died at a quarter to eight A.M.

SECTIO CADAVERIS.

Cranium. A large quantity of fluid was found in the sub-arachnoid tissue, and the visceral layer of the arachnoid was thickened and opaque, whilst the free surface of the parietal arachnoid, corresponding to the upper part of both hemispheres, and to the tentorium cerebelli on the right side, was covered over by a very thin, delicate membrane of a slightly yellowish colour, and containing in its tissue numerous minute points of blood, disposed in an arborescent form, and making it at first sight

appear as if the vessels beneath the parietal arachnoid were very minutely injected; but the whole was easily peeled off in the shape of thin films: these appearances were more marked towards the posterior than towards the anterior part of the skull. The brain itself was of a pinkish colour generally, but the puncta of blood in the centrum ovale of Vieussens were large and numerous. The ventricles were slightly dilated, and contained some clear serum. In the central part of the left corpus striatum was a yellow spot of the size of a sixpence, the surrounding part of the nervous tissue being of its natural colour; both the yellow spot and the parts in the neighbourhood were softer than any other part of the brain. The other parts of the brain and its vessels were healthy.

Thorax. A large quantity of fluid in the cavities of both pleuræ; more, however, in the left than in the right, which was partially obliterated by old adhesions. The right lung was throughout the greater part of its extent loaded with very large quantities of red frothy serum, and the left lung was somewhat compressed, but not œdematous; small quantity of clear fluid in the pericardium. Heart enormously enlarged by dilatation of its cavities, with atrophy of its walls; all the cavities were distended, but especially the right, with large, firm, and dark coagula of blood, which also extended into the large vessels connected with the heart; left auriculo-ventricular opening slightly contracted by thickening of the mitral valve, the other valves healthy.

Abdomen. The peritoneal cavity contained a very large quantity of clear straw-coloured serum, peritoneal covering of the liver opaque and slightly thickened. Liver itself somewhat contracted, and with round margins. Venous hepatic congestion of the second degree existed to a great extent. Both kidneys were of their natural size; the capsules adhered more firmly than natural, but the surfaces of the organs were perfectly smooth; spleen hard, small, and congested; superficial ulceration of the cervix uteri, with congestion of the upper part of the vagina. Structure of the uterus itself soft and easily torn, and its mucous coat was congested and covered with a foul secretion. The ovaria presented nothing remarkable.

REVIEWS.

The Sanative Influence of Climate. By Sir JAMES CLARK, Bart., M.D., F.R.S., Physician in Ordinary to the Queen and to the Prince Albert. 4th edition, 8vo., pp. 412. London, 1846.

Perhaps no man of the present day could be found better qualified for writing a comprehensive and complete work on climate than Sir James Clark. For the due accomplishment of a task like this, various prerequisites are needed. Foremost of these is a sound knowledge of practical medicine, and of the various sciences auxiliary to it. Without such, it is obvious that the judgment of the observer would be liable to be imposed upon. The characters and causes of disease, and the particular and general indications of its treatment—in other words, rational pathology and therapeutics—are the first qualifications called for. To these should be added, at least, competent knowledge of chemistry, geology; natural philosophy, with all its relations to atmospheric, terrestrial, marine, and fluvial phenomena; botany, geography, &c. These things, theoretically understood, should afterwards be confirmed and made positive by actual experience in the particular scenes peculiar to their application. To know the several facts in theory is important enough; but to know them in practical detail is much more so. Only thus known can they be scientifically and skilfully rendered to us as items of instruction. To say that Sir James Clark has answered the chief expectations that would be formed of him on the subject of that before us is, in other words, to say that this selfsame work has legitimately reached its fourth edition. Were none other proof present, we could easily refer to this as demonstration enough, considering the general character of the work, that it had not realized its rapid and extensive demand without having fully deserved it. To this professional and popular opinion we have great pleasure in adding our own deliberate testimony. We have no hesitation in declaring our belief, that the work of Sir James Clark on climate is the best extant on the subject which it comprehends.

To enter into a worthy analysis of it would not consist with the space we can afford to devote to its consideration; we must therefore be content with giving its leading features.

After a judicious and generalizing introduction, somewhat pithily illustrative of what is to follow, we come upon the text proper at once. *Part the First* comprises, in light but accurate detail, the leading characteristics of dyspepsia, which our author divides into the gastritic, irritable or nervous, and atonic. To these succeed observations on tuberculous cachexia, pulmonary consumption, ventilation and unhealthy residences, diseases of the larynx, trachea and bronchi, asthma in its several varieties, gout, chronic rheumatism, delicacy in childhood and youth, climacteric disease, diseases of warm climates, and convalescence. Without pausing to comment on any, it is bare justice for us to say that all of these particulars are treated with a just judgment and a delicate discrimination.

Part the Second, after some admirable general directions for invalids, preparatory and subsequently to change of residence, is constituted of remarks on the different climates and places that are valuable as resorts for invalids, the world over. There are no less than fifty-two select places treated of in reference to their physical geography, their general salubrity, and their adaptability to mitigating or curing different forms of disease. This part constitutes the leading feature of the work, and it is executed with a skill and judgment that leave little or no room for criticism to suggest improvement. The work is terminated by an appendix concerning the climate of the southern hemisphere, mineral waters, natural and artificial; and the meteorology of the different places previously treated of. The last two, as matters of reference, cannot fail to be of considerable advantage to those who may need to consult them. The style in which the work is written is excellent. It is elaborate enough for the professional reader, and yet sufficiently simple and explicit to constitute a travelling companion to the invalid. To both we commend it, in the unequivocal belief that it is the best book in any language on the subject it embraces.

The Elements of Natural Sciences. By Prof. DUMERIL, of the Institute. Paris: 5th edit. 2 vols. 8vo. Pp. 326 and 354.

This curious work appeared for the first time in 1802. The plan was conceived by Napoleon, and executed by his orders. Professor Dumeril so exactly embodied in his work the ideas of the First Consul that the book was at once adopted by the University, and has since enjoyed the merited honours of five successive editions. Conciseness was the chief object of the author, and he certainly has succeeded in attaining it, without injury to his subject. The first volume contains a complete treatise of chemistry, geology, and botany; but it is in the second that the natural tendencies of the author are chiefly discernible: it contains a complete history of organized nature. The chapter on Insects is one of the most curious in the book; M. Duméril has spent sixty years in their study, and nothing has escaped him, from the habits of the aquatic spider to the murderous tastes of the hydrophilæ. The fishes and birds also afford M. Duméril the opportunity of the most interesting details. The learned author excels in graphic description, and in the happy art of casting a lively interest over a subject which the multiplicity of scientific divisions seems to have endowed with didactic aridity. The book is full of interest, every line contains information; and its compact form makes it invaluable to those who are desirous of obtaining in a short time a complete insight into the details of the accessory sciences.

OBITUARY.—We regret to have to record the death of George Langstaff, Esq., which took place at his residence on the 10th inst.

TO CORRESPONDENTS.

Several letters have been received, commenting in strong terms on the Hounslow case of flogging, for which we have no room. The interest on this subject is rather increasing than diminishing, but we have endeavoured ourselves to do it justice.

The paper by A Licentiate of the Hall *is under consideration.*

The cases by Mr. Smith, house-surgeon to King's College Hospital, have been received.

Josephus *on Cholera has been received.*

Dr. Walker's *strictures (from Ludlow), in reply to a certain Dr. Bell, we are reluctantly compelled to decline. We cannot* constantly *consent to be a court of appeal—after the erroneous or unjust decisions of the lower courts, we had nearly said! The paper may be inserted as an advertisement.*

Dr. Orpen, *who writes a long article complaining that the Editor of the* Lancet *lends himself a willing tool to private professional malice, is requested to accept the above answer also.*

M. D.—*It was not Mr. Guthrie, but Mr. Wakley, who published without provocation a confidential paper by Mr. Lawrence, after keeping it in his possession twenty-five years with a view to some such purpose.*

A Subscriber.—1. *The registration has died stillborn. It is withdrawn as we prophesied.—2. Mr. Guthrie.*

A St. George's Student *will probably find what he asks for very shortly in the "Medical Times."*

Mr. Yates. *—Midwives in England are not required by law to prove any qualification or to possess any diploma.*

For Mr. Webb's vigorous letter on the Registration Bill we have, unfortunately, no room.

Mr. Self *may depend on it that we shall not long overlook the* assurance *offices* modestly *demanding professional toil gratis.*

Mr. A., *New Ross, is informed that we have no time for private replies to scientific questions. His question is, besides, one on which we have no information.*

The National Institute.—*Several letters have reached us on this important project. We shall give some, and enter fully into the matter ourselves in our next number.*

A Subscriber, *perhaps, wishes to rescue one of his communications from the oblivion to which he has voluntarily consigned it by publication in the pages of the journal named. Our worthy correspondent, we are sure, will, on second consideration, admit that pending the law proceedings there is no course open to us except that we have taken. The paragraph was an oversight.*

Mr. Alfred Markwick *shall be communicated with privately. His second paper has been received.*

A Junior Practitioner *should attend the practice of the* London Cutaneous Institution, *taking as his text-book the valuable lectures of* Mr. Startin, *at present in course of publication in this journal.* A Junior Practitioner *will find the subject, hitherto confessedly a very intricate one, rendered extremely simple by* Mr. Startin's *mode of classification, and by his scientific application of a few general principles.*

Mr. P.'s *letter is an advertisement.*

The paper headed Pulpy Wilson *cannot be inserted.*

THE MEDICAL TIMES.

SATURDAY, AUGUST 29, 1846.

"Aude aliquid brevibus gyaris et carcere dignum,
Si vis esse aliquid."—JUVENAL.

"There is another feature in the trial which has given so painful a celebrity at present to the 7th Hussars, and that is the flippancy of the coroner's remarks. The attempts at wit in which he appears to have indulged, and the laughter thereby excited, at an examination of so sad and solemn a nature—these have equally surprised and offended foreigners, and are little calculated to recommend the publicity of judicial examinations."—*Berlin Correspondent of the Times*, August 15.

To say that the person called by competent authority Quackley ought to be removed instanter from the post of coroner, is just to

affirm that the coronership is a responsible office. Is it a magistracy that requires decorum, dignity, moral-worth justice? Look, then, at the Hounslow inquest, and say what word is needed to show the unsuitedness of the magistrate. Is it true that a more perilous spectacle cannot be pictured than that of an innocent man hanging for his fate, in a moment of popular excitement, on the decent fairness and common honesty of Coroner Quackley? And does this desecration of the most sacred of human trusts show itself in a country above all others sensitive to the administration of justice? Why, then, is there a day's delay in ending the judicial infamy? Happily every thing tends to make that effect inevitable. Even the pledge of a Criminal Information against ourselves, given by the accused magistrate before Parliament, cannot be kept, more than the promise of a further investigation by a Government Minister, without securing us the boon; and even if both pledges be broken—as *one* of them will be—the desired consummation can still not be long wanting. The matter is of such importance in a matter all-important to Englishmen—the administration of justice—that the wrong must be forced home, the uncleanliness on this bad magistrate's hands made public, and Government compelled to do the decorous and just thing.

Reviewing the way in which this man *managed* his medical testimony at this inquest, we have, in that *alone*, more than sufficient evidence to convict him of injustice and partiality in their lowest phases; and when we connect with that evidence all the other circumstances of the case, we adduce proof demonstrative that this injustice and partiality originated in a corrupt and wicked intention. This is strong language; and if unfounded would secure us not the menace only, but the *penalty*, of a criminal information; yet we use this strong language most advisedly, pledging ourselves to proofs even stronger.

We contend, first, that the calling in of Wilson was not only an extraordinary and an unnecessary, but also a most improper, exercise of judicial power. The poor man White had died of *acute thoracic disease* twenty-seven days after the flogging, after having previously recovered, according to his own belief and that of competent witnesses, from all the effects of the punishment. The doctor attending the patient affirmed that he died of *acute* pleuritic disease; two army surgeons, unconnected with the flogging, asserted the same thing under official responsibility; two surgeons appointed by the coroner and jury (Messrs. Day and M'Kinlay) subsequently examined and corroborated their statement. If medical men can prove anything in a court of justice—if medical testimony be worth one rush before public tribunals—the scientific testimony was here complete. Suppose Dr. Warren partial; suppose the two army surgeons prejudiced: yet, when the two gentlemen sent by the coroner professedly to oppose them support their conclusions, there surely was an end of all incertitude. The coroner's own two witnesses put him out of court in his unwarrantable suspicion of their three medical predecessors; and, if his former distrust were honest, this extraordinary corroboration in every disputed particular must have completely removed it. To call in another witness would be now to disbelieve, to disparage, to compromise not three but five medical men, two of them his own selection; and where was the pretence for so extraordinary a procedure? Was the man's death not satisfactorily accounted for on scientific principles? It is not affirmed for an instant. Did the four witnesses differ? On the contrary, both sides perfectly concurred. Was there any lack of data? No; for there were two *post-mortem* examinations most carefully made at different periods. Do they suggest that there was any doubt on their minds? No; for they felt none. Nothing of this kind is pretended. We say stoutly and unhesitatingly, then, that there was no legitimate cause for asking for another medical witness; there was, however, abundant illegitimate cause. If it were the interest or the policy of the agitating coroner to continue a popular hate, however undeserved, against Colonel Whyte and Dr. Warren, and to arouse a popular liking, however unmerited, for himself; to go on exciting a mutinous spirit in the army in his favour; to extract from the criminal inquiry he presided over, at whatever cost to others, the elements of *political* notoriety, and the materials for a successful re-election in Finsbury—if such were his intent, and such his policy—the very first of his aims would be to discredit, no matter by what violation of decency or custom, the five medical witnesses; to rake up, at any price or at any hazard, some confidential friend and dependant who would flatly contradict and discredit their conclusions before the public; and, finally, to take care in the meantime to keep those conclusions back from the witness-box till the very moment the adverse witness could be produced and pitted against them. Now, what were the facts? The coroner, finding that his medical witnesses were unanimously of the opinion which would strip the inquest of its tragic interest with the public, refused to hear their testimony! He made a further adjournment, and used the interval in instructing his friend Wilson to get up his set-off testimony to the matplot truths of regular and well-informed science! The evidence of five medical witnesses waiting to be examined is flung back another week, rather than chill with their dry facts the excitement of the public mind!—nay, three of them are actually, by express order, excluded from the public inquest-room, lest they should say anything which, reaching the reporter, might cool the popular ferment! One of these excluded gentlemen, too, Dr. Warren, is accused, by implication, of the crime of murder!

But, suppose the magistrate honest in all this, and unbiassed by any corrupt view of personal advantage or mob-applause, would he yet have selected, to oppose these five gentlemen, his own "intimate"—a man formerly his own servant, writing with him in a subordinate capacity in the same journal, and depending on his patronage for daily fees as an ambulatory *post-mortem*-examination maker? Or would he, when successful in getting adverse testimony in such a suspicious quarter, be so anxious to shut out further inquiry as forthwith to balance, before the jury and the country, that dependant's word with the deliberate evidence of five honourable medical men? If he suspected the evidence of five professional men—his own medical brethren, whose all rested on the goodness of their characters—how happens it that he had no doubt about the commodious evidence of one hireling dependant? If he really distrusted the whole corps of scientific witnesses before him, and really aimed at justice rather than making out a case *coûte qui coûte*, he had surely sufficient common sense to teach him that the proper course—the usual course, the unsuspected course—would have been to call in such unimpeachable authorities as a Knox, a Fergusson, a Sharpey, a Partridge, or a Todd, and so to have corroborated their evidence if opposed to that of their five predecessors, that no doubt could have been left on the subject, and no imputation thrown on their testimony. He did no such thing; he did everything to avoid such a thing: can there be a doubt why?

But the demonstration of a corrupt animus in this English judge does not stay here. By a clever manœuvre, Mr. Day, the coroner's witness, having his testimony adjourned too, is not allowed to commit himself publicly to his known opinion as to the cause of death, and is therefore not yet wholly despaired of. Well: the upright magistrate, adjourning the proceedings, orders that during the third *post-mortem* examination—actually a *third* cadaveric examination!—nobody shall overlook Mr. Wilson but Mr. Day! To get rid of strong opposing medical testimonies, all unanimous, the judge takes refuge in a hireling witness and a hugger-mugger autopsy!—and, therefore, medical men whose liberties or characters are involved in the honesty and good faith of this very suspicious examination, are rigorously excluded—and though Wilson, within a stone's throw, is making extraordinary anatomical discoveries he is forbidden the "satisfaction" of pointing them out to the recognition and discomfiture of his adversaries! The coroner thus selecting a convenient witness *coûte qui coûte*, and thus affording him a very convenient secrecy *coûte qui coûte*, might have been content, one would have fancied, with his pre-arrangements for getting evidence of the required quality; but no: Mr. Wilson receives from him careful instructions: the impartial witness is not to look through the body for the cause of death—but to find it in "the back and spine." "His attention," to use Wilson's own words, "was to be specially directed to the back and spine"! Five medical men were ready to swear that the cause of death was to be found in the state of the thoracic viscera; but Wilson held coroner's instructions to look for it especially in the back! But how stands the fact? *Strange as it must appear, Wilson did not, after all, find the cause of death in the back.* Mr. Day tells us in positive terms, in his letter to the *Times* of August 15, *That during the examination, and afterwards, while drawing up the report of its incidents, Wilson did not hint that the back had anything to do with the death; that during that day Wil-*

son quite concurred with him, and, consequently, with the four other medical witnesses, and the he—Day—after seeing and hearing what he did at the autopsy, was "exceedingly surprised," at the inquest, to hear Wilson's subsequent "imaginings" and "after-consideration" fancies, given in evidence to the jury as his deliberate medical opinions! The witness so chosen—so helped by secrecy—so instructed—came away from the autopsy, like the others, another Balaam blessing those he was sent to curse! How happens it then—everybody asks—that we have from this same Wilson, given with the sanction of an oath, testimony so strangely changed, and so awfully agreeing with his coroner-friend's views? We do not profess to divine, but indisputably it is the strangest, the gravest, circumstance in medical ethics that ever came under our attention as journalists. Connecting with so mysterious a vicissitude and transmutation of scientific *fact* the studied vagueness and absurdity of the anatomical language by which the afterthought conviction is supported, and remembering that the liberty, perhaps the life, of a brother medical man rested on the startling testimony, we shudder as we think, and ask, is this the criminal justice, are such the criminal witnesses, secured us in our country under a British magistrate, responsible for his conduct?

But if the way in which the coroner managed to get up Wilson's evidence deserves the strongest reprobation, what shall we say of the evidence itself? For palpable absurdity in intrinsic nature, as for daring atrocity in purposed result, we defy its parallel. What the testimony of Titus Oates was in politics, this is in science. The whole medical world is aghast at its stupendous falsehood. Passing by the singular phraseology and curious omissions of his testimony, imagine a *lecturer* on anatomy swearing, in so many words or by implication, that the well-known phenomena of decomposition presented by a body in the last stage of putrefaction, are the result, and can be the result, of nothing but a change of structure in living fibre!—that the *multifidus spinæ* lies on the membranes of the chest!—that this half-tendinous and inert muscle had been suddenly seized under the flogging by convulsions, which left unnoticed the energetic and susceptible masses of muscle superimposed from the longissimus dorsi to the integument!—that either an inflammatory action in this muscle traversed a plate of bone more than half an inch thick and reached the pleura, or else that no such column of bone intervenes between the two localities!—that a portion of a muscle, acting always instinctively and entire, took on a convulsive action in direct antagonism to all we know of the law of respiration!—that the two intercostal muscles, instead of acting in invariable unison as usual, became disassociated and acted separately!—that the spinal portion of the intercostal is in immediate contact with the pleura!—that disorganization of the muscles after flogging, with acute inflammation of the thoracic viscera, naturally took place on the side least injured by the punishment!—and, finally, that a man who survives a flogging twenty-seven days, and who dies under all the symptoms of acute pleuritic disease, would *certainly* have defied death except for the corporal punishment! A London lecturer on oath venting such testimony! With the fact palpably before us, we confess we can yet hardly muster credence for it! Yet it was by such evidence, and so manufactured, that the solemn judgments of five conscientious practitioners were to be disproved, and their reputes damaged. Dr. Warren possibly placed on his trial for liberty and life, and a vast *political* delusion maintained in its integrity in the public mind! What language of denunciation of either the witness that gave, or the magistrate that sought and adopted, the testimony, can adequately describe their conduct? We know of none.

Sensible men ask how it is that, after all these showy and artistic preliminaries and concomitants, the inquest could have resulted in so "lame and impotent a conclusion"—

"Amphora cœpit
Institui; currente rota, cur urceus exit?"

We had first the newspaper supplied with reports; a most mysterious opening of the inquiry; repeated adjournments to suit the conveniences of the Sunday's press; irrelevant examinations and correspondence, gibes, gambols, "flashes of merriment setting the table in a roar"; sententious sayings, "de omnibus rebus et quibusdam aliis"; three *post-mortem* examinations; a convenient witness—more bedizened with celebrated certificates than a twice-plucked pupil—brought express from London to startle the public and amaze scientific men with pathological discoveries made expressly for the occasion; medical men rigidly excluded from a public inquest-room; a melodramatic examination *preceding*, a mysterious secrecy *accompanying*, the *post-morten* examination—in short, justice, order, propriety, all broken and violated to invest the performance with tremendous *eclat*—yet all ends in the verdict that the flogging was legal, and its administrators free of blame! The fact appears to be that the magistrate, who began the inquiry with all the fanfaronade of the Hector, finished it with all the timidity of the coward; and was as much in fault in the craven conclusion as in the braggart commencement. If the flogging killed the man, then was Dr. Warren responsible for the consequence. The case instantly became one of manslaughter; and, whether the guilt by negligence or ignorance was great or small, a criminal investigation was imperatively called for. But that investigation would have given the whole question a fair trial before an impartial tribunal; and hence, after teaching the public, through Wilson, that Dr. Warren allowed a patient to be flogged to death, the coroner is the person to let Dr. Warren go abroad untouched, unaccused, everything but *unslandered!* Besides, if the court-martial was held, as "Coroner Quackley" tells us,* on a warrant signed and issued fourteen weeks before any offence was committed, it appears to us difficult, on constitutional principles, to deny that the whole process of martial law was illegal from the commencement, and, consequently, the "flogging to death" must have amounted to murder. In a double way, therefore, the magistrate had the opportunity of giving full practical effect to the views he pretended to entertain of the case; but in a double way he declined. He was very ready—very *daring*—for any amount of *wordy* humanity; but when it came to honest deeds and actual risk—he would rather not, thank you!

But the magisterial indecencies were not done with the trial. The president of a criminal investigation—most *criminal!*—is afterwards seen publicly lauding or vituperating, in the House of Commons, British witnesses, according as their testimony had been made to subserve his political views in the inquest court: is self-confessed to have gone begging to an humble country attorney for certificates of his decent behaviour as a British magistrate; and, finally, is witnessed presiding over an agitating meeting—addressed by Cleave, Vincent, and other orators of similar political views—held to sustain strongly-partisan opinions on the very subject he had been inquiring into as judge; a meeting, too, at which sentiments the most mutinous were addressed to the soldiery present, and proposals made by the very coroner himself for a handsome money allowance to a military witness of impeached character, who had given testimony at the inquest favourable to the well-known bias, nay, to the well-known interest, of that coroner!

We will not now encroach further on the public's attention, save to register for the third or fourth time, in the strongest language we can command, our unalterable protest at the utter, the disgracefully utter, unfitness of such a functionary to discharge the trust of an English magistracy. Neither liberty, nor character, nor life can be safe while so unfair, so unscrupulous, so dishonest a partisan desecrates the judicial seat. His presence there is a denial of impartial justice to the public, and is an opprobrium and a stigma on our judicial character in the eyes of all nations. The general prostitution of our criminal jurisprudence to the purposes of private or political needs, is the question his conduct raises in issue; and the inquest at Hounslow, with its ruthless sacrifice of good men's repute, its unprincipled enlistment and welcome of *Wilsonian* evidence, and its tragi-comical management of almost every incident in the important case, is proof conclusive, without any of the incongruous and startling *sequelæ*, that there can be no court of justice unpolluted which this libellous journalist, this violent agitator and sham "*humanitarian*"—is allowed to disgrace with his presidentship.

* In divulging this grave circumstance at the meeting at Exeter-hall, this upright magistrate said he would have kept it a profound secret if he had not been so attacked!

Misce stultiam consiliis brevem:
Dulce est desipere in loco.—HORACE.

It was our intention, at the close of July, to offer sundry words of advice to students; but other business more immediate having demanded the services of our pen, we have been compelled to postpone a few ethical phrases until this late season. Upon the good old principle, however, of "better late than never," we offer this short apology, sure that it will acquit us of anything like deliberate forgetful-

ness towards a community we have ever taken deep interest in.

On the commencement of last winter session, we greeted our old pupil-friends afresh, and gave a cordial welcome to the recruits of our goodly corps; and subsequently suggested to these latter the best means of prosecuting their studies and providing for their health. Taking for granted that our advice was followed, and that the winter and summer sessions have been passed through in all diligence and discretion, we have now to consider the welfare of our young friends during the period of vacation.

Only those who have sojourned for nine studious months in London, solitary and self-devoted, amidst the din and bustle and gaiety around, know what the pleasure is of breathing a pure air, and having a few friends they can call their own, and a few idle weeks they can afford to do as they like in. Studentship is all very well to make a jest of by those who can afford it, but to those who cannot it is a very different affair. The man who is his own master, in person and pocket, can indulge freaks of study and of relaxation just as the whim may seize him. What is voluntarily imposed or inflicted can scarcely be considered a trouble or a penalty, because the will that orders, can as easily countermand, obedience; the burden, therefore, if such it be, is sustained willingly, from a consciousness that it can at any moment be disposed of. This is one of the many things that make *volition* one of the loftiest, as well as the most agreeable, attributes of our nature.

Without pursuing this train further, we may affirm, without fear of contradiction, that, in pleasantness and comfort at least, there is no comparison between the studentship that is self-imposed and that which is forced upon us. To take up a book, conscious that you can lay it down when you will, and be responsible to no tribunal for the freak, is to make the study of that said *tome* the reverse of burdensome. And many is the time when a disposition to a little amiable idleness, or an utter unfitness for fixing the attention and exercising the memory, would induce one to throw all care for facts aside, and revel luxuriantly in unstudied flights of fancy. We envy not the poor slave who has never had promptings like these, but, dray-horse like, is ready for his work whenever it is duly allotted him, and the time has come for its performance. Such men are non-naturals, and not worth the regard of anybody. The reverse of these are the men after our own heart; and right sorry are we for them when not able to "do as they like" with what would seem to be "their own," viz., themselves, and the scrap of time apportioned them to live in.

This, however, must be considered the fate of medical students whilst under the trammels of probation. There is a serious obligation at hall, or college, or university, or some such place, that demands constant care and anxiety to secure the due discharge of it. To this end the student is bound to consider himself not his own master, but the slave of his subject, until it be fairly off his hands. His time is not his own—his talents are not his own—nothing, in fact, is his until the incubus be off him. It lies a heavy load upon his conscience, and weighs down any pleasantry of heart that would arise within him, to claim kindred with the laughing spirits less fettered than himself. The curriculum of study, and of examination, is always before his eyes; a floating mist of miserableness that obscures all the brighter objects that flit before him. There are these books to read—those bodies to dissect—the other lectures to attend—all these things, like imperious creditors, are at him incessantly, and no wonder that their din drives him into solitude and abstraction. There he is, poor fellow, closeted like another anchorite, wrapt in his own reflections, and as completely alone in the world as though he were the only living object inhabiting it. If he go out for a breath of fresh air, it only occurs to him as a medium containing more oxygen and less carbonic acid than the one he has just left. If he gather a flower, it is only to look at it with a botanical eye, or to inhale its aroma with a scientific regard to the chemical constituents thereof. If he pass a rippling river that would once have brought Isaac Walton or a stray sonnet to his remembrance, he thinks only of the anatomy and physiology of fishes and the composition of water. He lives utterly in a scholastic medium. In the country—

"He only sees the leaves of trees exhaling oxygen."

In town—

"He only sees the lungs of men inhaling it again."

At home—

"He cannot dance, his only steps are up the stairs to class;
He cannot laugh save with a dose of nitrous oxide gas;
He cannot sing a merry song, or take his toddy free;
He's just a moving mass of strong specific gravity."

Ask him to the theatre—he says:—

"I cannot go—
The stages of a fever, now, are all the stage I know;
Instead of Murray's Turner Giles, I've Murray's Pharmacy;
The operation benches are—box, pit, and gallery."

No wonder that, after some months' sojourn in an artificial state of thought and feeling like this, body and mind should both suffer and yearn for relaxation and a more natural state of existence. These latter are the blessings that the student enjoys during the months of vacation. Text books, and tomes of every sort, are thrown aside, or rather carefully packed up, until the forthcoming October—the dissecting-room is bade a polite and not reluctant farewell—the small, dingy, dirty lodging-room, and its smaller appendage, yclept a dormitory, are left to the solitude befitting them—and the pale-faced, sunken-eyed, melancholy inhabitant, accompanied by his wardrobe and a pleasant companion or two out of his library, is off to the old house far away in the country to enjoy the society of his friends, and luxuriate on fresh-laid eggs, draughts of new milk, and breezes of pure air. How he greets everybody when he gets among the familiar faces of his childhood, and how everybody greets him, we do not pretend to say. He has been away for nine months, and, of course, must be so altered and unlike himself that he needs almost to be ticketed or franked, to be taken in. The London tailor has sent him home in such habiliments as were never seen in the village before—and not only in these, but in every thing, from his hat to his boots, he is so at variance with what he was, that he might have walked straight through the hamlet, and into his own father's house, and the bewildered gossips would have wondered whoever the stranger could be! An old twinkle of the eye, however, and an old curl of the lip, tell of the absentee; and the cordial hand that bade him good-bye, and the starting tear that more eloquently than words spoke "God bless him," a few short months ago, now testify their feeling afresh, in welcoming him back again to the scenes of his earlier lifetime. After all, this is a greeting worth the agony of parting and the pains of lengthened separation. To the young heart, fresh in its tendernesses and troubles and eloquent susceptibilities, it is especially so. This is the season when one's nature is most alive to the good or the evil that threatens it, and when the stamp of either may fix upon us its fatal impression for ever!

Well, our young friend is fairly at home—has *passed* the usual routine of inquiries from father and mother—an examination that is oftentimes not easy—has received the caresses of brothers and sisters, and the casual greetings of the old familiar friends who remember to have nursed and kissed him when he was a baby, and wonder why they should not nurse and kiss him now—he has got over all these things, we say, and no doubt lots beside. What is he to do next? Why, if he take our advice, he will take good care of himself. He has left one scene of bodily sacrifice: his great concern should be not to fall in the way of another. It is the custom now, as we understand it was of old, to kill the fatted calf by way of welcoming the stranger home. This said feat of butchery would be all very well, provided the stranger were not expected to perform more than his own part in the great pantomime of devouring the sacrifice. But, unhappily for the lion of a party, he is always expected to eat the lion's share, and this regardless of his inclination or ability to do it. We know what it is to be feasted by friends who have not seen one for months, and expect that we shall swallow at a sitting all the eatables and drinkables they have been registering to the account of our appetites since we parted. Such people have no idea of dyspepsia, nor of bursting either. One might be a boa-constrictor, fed only at distant periods, and no matter with how much at a time.

The things that we are discoursing of are the follies, rather than the faults, of friends; they come with the best intention; but, if allowed, they are not generally followed with the best results. We would especially advise the student to beware of seeming trifles like these. If he do not they will prove troubles to him. He is already shattered; he wants recruiting, invigorating, and fitting again for severe work. A vessel disabled at sea would do no good by toying with her own weakness whilst in harbour for safety. This neglect of opportunity would either consign her to the ship-breaker or to the wave. So it is with the student. Returned home, shaken by the toil and anxiety of serious study, it concerns him to repair the havoc and injury his constitution has suffered during his period of confinement. Let him thank God when the blue sky beams

and the pure air breathes upon him! He can never value their goodness too highly: he can never be too grateful for the benefit they bring him. They are not trifles in his way, but tributes to his existence; and the abuse or neglect of them carries something suicidal with it!

The subject is important enough to induce us to hope we may be able to treat afresh, and terminate it, next week.

ANNIVERSARY MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The fourteenth anniversary meeting of this association was held at Norwich on Wednesday and Thursday the 19th and 20th inst.

At one o'clock on Wednesday the first general meeting of the association took place in St. Andrew's-hall.

J. G. Crosse, Esq., having taken the chair, was warmly applauded, and, after acknowledging the reception he had met with, said,—Gentlemen, in entering upon the high office to which I am now called, I feel incapable of saying anything that can adequately portray my excited feelings. To be placed nominally at the head of so large and influential a body as the Provincial Medical and Surgical Association, composed of above two thousand members of our profession, is, indeed, a giddy height, which must be perilous to myself, and can be rendered secure only by your further kindness and support.

I consider it an auspicious day for the profession in this district, that in our ancient city, situated so remotely from the great moving centres of human life and action, so many gentlemen of respectability, talent, and distinction are assembled together for purely scientific and social purposes. The numerous body already present offer a sufficient guarantee that much is about to transpire; and as time, always precious to all, is particularly so to ourselves, I will not detain you longer with merely introductory remarks.

I well remember, at an early period of my residence in this city, becoming acquainted with an extraordinarily endowed individual, who had travelled throughout Europe, and gained access to a great majority of the sovereigns, judges, prelates, and other men of high estate in each country that he visited, and he assured me that his plan was always to inquire for the leading medical men of every town he entered, finding it the readiest way to get access to the highest and the best-informed classes of society. I have every reason to believe that the favourable character which my itinerant friend expressed regarding the medical profession continues to be fully maintained, in the provinces, not less than in the metropolis of this empire. In almost every considerable town, the physician or the surgeon acts the Mecænas, to the full extent of the time and means at his command, towards all intelligent and scientific men resident in or visiting his locality; and well may the medical man estimate science, and desire thus to encourage it, since there is scarcely any branch of scientific knowledge that may not, in some way or another, be applied to his calling, whether we look to daily social intercourse, or to the nature of diseases, and the various appliances for their relief, prevention, or cure.

A warm zeal for medical science is undoubtedly the great source of its advancement in this country, where the Government has done, and perhaps is capable of doing, so very little; but one of its recent and most valuable acts deserves to be mentioned—the annual report of the Registrar-General, which, worked up to the highest pitch of correct mathematical calculation in the department which relates to disease, promises to supply great advantages to the State, and to be a guide to our prudential institutions for life insurance; towards these improvements every practising man gives his gratuitous aid, by furnishing certificates, for which the public remain indebted to him. In the army, medical officers continue to perform laborious duties by furnishing reports, and the public are as much in need and as much entitled to an annual summary of what transpires in the civil department: but those documents continue to accumulate, without being converted to any proper statistical account, and must, in course of time, increase to so unwieldy an extent that nothing but a deluge or a conflagration can dispose of them. The Government is just beginning to direct its attention to sanatory regulations throughout the provinces, which must prove a national benefit; and perhaps we may regard the arrangement for partly remunerating the most working members of the profession, the union surgeons, out of the public funds, and thus connecting them with the state, as a movement in the right direction, and a security for further improvement in the medical care of the poor.

As a science to be studied for the public good, legislation on medical matters is entitled to every consideration. Until recently, it received less attention from the Executive in this than in almost any other civilized country in the world, although the profession have been agitating the subject for nearly forty years, to my knowledge, but most warmly in the last three or four years. And, after all, what are the conclusions most generally arrived at and avowed by the greater number of thinking and experienced men? A few general principles are what they agree upon; and foremost may be placed a general registration of all legally qualified, with annual publication of the registry. The next are uniformity of education and community of privilege in each grade throughout the empire—principles which will be more appreciated every year, by the increasing intercourse which rapid and easy transit is sure to produce, rendering the present incongruities more and more apparent, until they will be deemed too absurd to be longer maintained, and we shall see the profession in England, Scotland, and Ireland united in one brotherhood. It is not a little extraordinary that "the protection to the public by penal laws against the unqualified" seems not to be so generally admitted as a necessary principle of legislation. To carry out the principles I have enumerated would be, in my humble view, a great boon to the public, and not less so to the profession; and all minor details are scarcely worthy to be regarded as immediately essential; particularly at the risk of our getting nothing done; in grasping at the shadow we may lose hold of the substance.

But there is one truth worthy of being made prominent, and of being frequently placed before us—sound legislation will benefit, but the influence, respectability, and high *status* of the profession in this country must be secured and maintained by very different means—by knowledge honestly applied—by integrity, assiduity, kindness—by the absence of all contentious, narrow, over-selfish, and grovelling passions—by liberality and forbearance towards each other—and I may be permitted, I am sure, before the present company, to add, that the exercise of all these virtues which I have enumerated, and their results, will be greatly promoted by social and scientific intercourse with our brethren, such as the Provincial, and all other associations in the empire, are calculated to foster and promote.

But the best prospects are held out when the improvement of society at large accompanies that of the profession; for how much depends upon the state of the public mind, its information and its power to discriminate! A powerful influence is reciprocally exercised between the public and our profession; in the Metropolis and with the preeminent it may be otherwise, but in provincial towns, every medical man may be said to practise in his own atmosphere. The grounds for selecting an ordinary medical attendant are as various as the dispositions, tempers, and minds of individuals; these are matters to be left to their own unavoidable course. Disregarding as far as may be the whims and prejudices of the public, we should direct our minds intently upon these three objects:—The full attainment of the sound medical knowledge of the day—the diffusion of what knowledge we possess—the advancement of medical science! On each of these a man may base a solid reputation, but on account of the last only can he be considered as entitled to renown.

As to that notoriety, disconnected from superior knowledge, and depending on transient multitudinous applause, it ought to be little prized by members of such a profession as ours; rarely, if ever, is it durable, never satisfactory. The public favour, on which such notoriety floats, has been compared by one of our greatest writers to a running stream, which lifts the frothy and light materials to the top, but lets the solid and weighty sink to the bottom.

"*Levia et inflata attollit, gravida et solida mergit.*" It enables our calling to endeavour rather to correct the defective information of the class of society we approach, than to convert it selfishly to our advantage. How much at our mercy is the *malade imaginaire*—the greedy consumer of innumerable doses, till he is more sick from the medicine than the disease, "always tampering with his health till he has spoiled it, like the foolish musician, that breaks his strings with striving to put them in better tune." Happily the medical is not often charged with being a sordid profession, and few, very few, it is to be hoped, are justly entitled to the sarcasm of the greatest of English satirists, who has hinted that there are some who attend

"Not for the sickly patient's sake,
Nor what to give, but what *to take*;
To feel the pulses of their fees,
More wise than fumbling arteries;
Prolong the lamp of life in pain,
And from the grave recover gain."

Perhaps Plato had such in view, when he stated it to be a sign of a bad commonwealth, if physicians were very numerous; it would be a bad commonwealth to the physicians unless diseases were numerous also.

That our ancestors knew a great deal is unquestionable, even much that has been forgotten and that has passed away; but it was known to very few. The striking characteristic of the present day is, that what is worth knowing is known to a great many, and is accessible to the whole profession. It is on this more extensive diffusion of knowledge that we may justly claim superiority over our ancestors; the increased and yearly increasing proportion of well-educated members of our profession, and the diminished numbers of the grossly ignorant, are indications of our improved condition, quite as much as the advanced degree of our science. New and brilliant discoveries—often more imaginary than real, more vaunted than prized—are, as the pinnacle or spire of a fine edifice, attracting much attention, whilst its basement and interior correspond to that well-diffused, sound, practical knowledge, which is of every-day application, and can now be found in every part of our favoured country. That the diffusion of such useful knowledge is promoted yearly by the meetings of this association can scarcely be denied; let us endeavour that this and every future occasion shall be an improvement upon the past, and let each of us remember that what takes place in this public room may be considered as transpiring before the medical community, as well as before the criticizing spirits of the day, who take so much better care over our interests than we seem capable of doing for ourselves.

It must necessarily happen that a vast majority of our profession can aspire to no greater merit than that of collecting facts, for which, however, they deserve approval, and even commendation, if their facts be *true* and *real*; for it has been remarked, with some justness, that there are as many false facts as false theories. Mere facts, however closely connected, are as distinct from science as colours on the pallet from a beautiful picture worked out by the talents of an artist. In medical science, facts are the materials for a building, and require to be converted, by the operation of the minds of the more gifted amongst us, to their proper object—the awakening of philosophical ideas, and the construction of a theoretical system for our guidance. But the reverse of the inductive is too commonly the course pursued, even in these enlightened days; theories are first formed, and the facts are made to come afterwards, suitable to

the preconceived speculations; and it is melancholy to reflect, that when once a theory has taken possession of the mind, it cannot be displaced without offering another in its stead, often as delusive as its predecessor. Rarely, in these modern times, has medical science been beset with more bewildering theories of the day than at present; what one man honestly espouses, another ridicules and despises, and in the collision thus arising is found the wonted stimulus to mental activity; but that the infinitesimal follies of homœopathy, the drolleries and deceptions of mesmerism, or the more dangerous excesses of hydropathy, can ever long persist, or any one of them be brought to the position of a science worthy of general support, will, I trust, scarcely be admitted by the present enlightened assembly. Theories are unavoidable, and, where they are honestly embraced and used, to a certain extent, desirable, and may even prove useful; but were the great body of the profession —nay, were any preponderating number of this large association—to become captivated with any delusive doctrine, and to merge into the fanaticism of the day, we should be driven back to the dark ages of our history, denominated by a learned professor the stationary period of the inductive sciences, "when experimenters were replaced by commentators, criticism took the place of induction, and instead of great discoveries we had learned men."

One of the possible advantages which may arise from homœopathy is, that it will afford opportunity for observing the natural course of diseases, and be a check to over-active treatment in doubtful cases. In our difficult calling, whenever art does violence to nature, the apparent good is as an artificial fountain, that can be kept up only for a time; the more you consult the restorative powers of the constitution, the more surely will progress towards recovery, once commenced, flow in a smooth current, like a natural rivulet, till health is restored.

I must now enter upon topics still more serious and grave, yet which it would not be allowable to pass over in silence. The Hippocratic remark, that "life is short," may be applied most emphatically to gentlemen of the medical profession, who, on an average, live for fewer years than members of the other learned professions, notwithstanding the advantage the former might be expected to possess, in a knowledge of the first approaches of disease, and of their causes, with the means of prevention. It is difficult to state in few words to what this is attributable. The incessant and wearing duties of the medical man, and the impossibility of having any regular relaxation, tend mainly to shorten his earthly career. The attendant anxiety about patients, and about the means of a scanty livelihood, aided by the depressing influence of constant scenes of distress and suffering, may be added. Besides, the medical man never shrinks from attending a contagious patient any more than a brave soldier shuns the field of battle! How nobly and disinterestedly did our profession rush into danger, at the call of duty, when the Asiatic cholera, some years since, devastated certain districts in this country with an appalling rapidity and fatality—receiving in return the most groundless accusations from the uninformed and affrighted multitude! and more recently, in the instance of the "Eclair," did not several of the best of our brethren, volunteering service, perish under African malaria and pestilence?

But, apart from all extraordinary dangers, I find reason to believe that, under ordinary circumstances, in this district, and in the provinces generally, medical men on an average continue to meet the labour and duties of actual practice in their profession, little more than twenty years—a brief span indeed, scarcely thought of, and never rightly estimated by the young aspirant to public favour. Yet few have stronger reasons to calculate correctly than the medical man, who is usually so circumstanced, with others depending upon him, that self-preservation ceases to be selfish.

What I am about to state will appear contradictory to the preceding observations, and yet it is perfectly correct, so far as I have been able to ascertain, that since the last anniversary, and amongst one hundred and eighty members, composing the eastern branch, not a single death has occurred. The rest of the association may well exclaim to their eastern associates, "*O fortunatos nimium*"! and caution us to make the best use of our time, as the ensuing year may be expected to produce a different result, and to adjust the balance! Nay, even whilst I am thus engaged, I have to correct the statement and to record the decease of an eastern member, who was above ten years a zealous and steady supporter of this society; I allude to Dr. Chevalier, of Aspall, who, during a long life, and under the pressure of more diversified occupations than fall to the lot of most men, showed a disposition to "scatter oil over the troubled waters," and make all happy around him; he was more conspicuous for his amiable virtues than for his medical practice; with pious resignation he bore the inflictions of a painful disease, and sank into the repose of death in full and perfect hope of eternity!

The year's obituary of members resident in other parts of the kingdom is too long to permit of a full notice of each; neither time nor materials are at my command, for until a recent hour I knew not that this office would be assigned to me; but if an opportunity occur, and further information should reach me, I will enter upon the duty, most congenial to my feelings, of doing honour to the deceased, which is so powerful a stimulus to the living to emulate good example.

And now I must conclude my initiatory remarks, with expressing a fervent desire that all the occurrences of this anniversary may be calculated to do honour to our profession, and to promote the best objects of the association—science, cordiality, a beneficial knowledge of each other.

I must avoid prolixity, as it must throughout our whole proceedings be avoided, for economy of time. If brevity be the soul of wit, it is equally so of science, and of all that is practically useful and available in our busy life. Whatever comes before so numerous a meeting of the profession, as is now assembled in this city for the first time, and probably for the last in our day, should be well weighed and considered, and the motto worn by each contributor to our proceedings should be "Fugit irrevocabile tempus."

Dr. Streeten then read the report of the council, which was a very voluminous document, and which showed the affairs of the association to be in a fair condition. The report spoke favourably of the intention expressed by the late Government, of taking the payment of poor-law medical attendants partially out of the hands of the guardians of unions, as well as of the extensive measures proposed for the improvement of the sanatory condition of the working classes.

Dr. Hastings then read the financial statement of the association, from which it appeared that there was a balance in hand of £113 7s. 6d.

The following gentlemen were then admitted honorary corresponding members of the association:—Andeoz Adolph Retrain, of Stockholm; Dr. Ware, of Boston, United States; and Dr Oppenheim, of Germany.

After this Dr. Chambers read a paper on disease of the heart, which he attributed in many cases to the sudden adoption of total-abstinence principles.

The meeting then separated until the evening, when the members again met at St. Andrew's-hall. Soon after eight o'clock the chair was taken by the President, J. G. Crosse, Esq., who stated that he had one suggestion to make relative to an important resolution adopted in the morning, appointing a committee of gentlemen to inquire as to the mode of carrying on the publications of the association. That committee was instructed to report to the council, or to the next meeting of the association, on this point. The gentlemen had been selected for the interest they took in this matter; but there were two gentlemen present whom it was desirable to have added, namely—Dr. Chambers, of Colchester, and Dr. Durrant, of Ipswich. The Chairman then moved that the above two gentlemen be added to the committee.—Agreed to unanimously.

The report of the medical fund committee was then read and adopted.

Mr. Daniel read a report from a committee appointed at the last annual meeting at Sheffield, to consider the propriety of establishing a general annuity fund. The committee recommended such a fund to be established. An appeal had been made, to which sixty-eight members had responded; fourteen had subscribed; nine had paid donations amounting to £47 5s.; about twenty others had intimated their intention of becoming subscribers. Mr. Daniel, having read the report, appealed to the members to give the project their support. One reason he gave was, that the lives of medical men were more precarious than those of other professional men; in proof of which he stated that forty-three divines of every thousand lived to the age of sixty-six; whereas only twenty-four medical men of every thousand lived to a similar age. Mr. Daniel concluded by moving that the plan be received and recognised by the association.

Dr. Hunter, of Lynn, seconded the proposal, on the ground of its benevolent and useful character.

Dr. Conolly opposed the proposition.

A Member present expressed his gratitude to Mr. Daniel for his exertions, and the ability displayed in promoting the benevolent object he had brought forward. This feeling was warmly concurred in by the meeting.

Mr. Firth, of Norwich, read a paper on poisoning by arsenic, founded on the cases at Happisburgh. He stated that he had found arsenic not only in that part of the soil in the churchyard at Happisburgh where interments took place, but also in another part of the ground which had never been opened for the reception of the dead. Mr. Firth stated that he was still pursuing his experiments on the subject.

Several other papers were then read, and the meeting adjourned to Thursday.

On Thursday, soon after twelve o'clock, the third and last public meeting, at St. Andrew's-hall, was held. The chair was taken by the president, Mr. Crosse. In opening the proceedings he said they were now commencing the third meeting of the association, and he trusted that what had already transpired had so far excited an energy and proved a stimulus, and that as they proceeded they had progressed, and that this third meeting would be a further improvement on the preceding ones. He had every reason to believe that the association was satisfied as far as they had gone. He would not interfere with the privilege which gentlemen would now have of presenting such cases as might be deemed worthy of their attention. It would be only to waste their time to address them further in reference to the business to be brought before them; the best thing he could do would be to offer a few illustrations of some singular exhibitions, relative to medicine, in former times in this city, and the state of the profession at a remote period. His first illustration would refer to quacks. The information he was about to submit, he had obtained through a gentleman who was an antiquarian of great research, ability, and assiduity: he referred to Mr. G. Johnson, who was not a member of the profession. That gentleman had been employed in investigating the records of the city. He (Mr. Crosse) had obtained through Mr. Scott, one of the oldest if not the oldest member of the profession in the city, some extracts furnished by Mr. Johnson of occurrences that took place in this city and the immediate district. In 1690 the magistrates made an order that Dr. William Reid had agreed with the corporation for a stage, for the sale of medicine, at the end of the hall in the market, but not to interrupt the people coming to the pump. Another was, that Dr. Charles Bedest have leave to erect a stage upon St. John's-hill to vend his drugs, with music, to continue three weeks, he and his servants behaving themselves civilly. Another was, Cornelius Tilburne was allowed to set up a stage to practise chirurgery and physic, with music, in the city for one month. Richard Kirby was allowed to erect a stage on the "backside" of the Blue Bell, with music and eight servants, to continue for the space of fourteen days, they keeping good rule and order. From these illustrations connected with a branch of the profession, it would appear that these characters were authorised to traverse the kingdom. Mr. Crosse then proceeded to notice some provi-

sions made for affording medical relief in extreme cases to the poor at that period. Although the poor law was then in existence it was not applied in extreme cases in affording relief; that relief came through quite another channel. Charity was not so rife then as it is now, and it was necessary to have a particular channel for authority to appeal to the public. One extraordinary matter was to obtain funds for persons who sought the benefits to be then derived from the royal touch. There was first a sum of 20s. towards defraying the expenses of John Edwards going to Newmarket to be touched by Charles II., who was supposed to possess a wonderful power of curing. Another record was, that the wife of John Mills should have 30s. "out of the hamper," for travelling to and returning from Newmarket; and "Mr. Town Clerk was to write to know the day of healing." This was in March, 1683. This district was well known throughout the world to furnish an extraordinary number of cases of calculus of the bladder, and was also well known for the same thing a century ago, and was referred to in the document from which he was quoting. To go further back still, it would be found that the clergy, the chirurgian, and the doctor exercised the same function. Not far from this city was a monument erected to a clergyman, who was also a great chirurgian, and who would appear to have had much success in cutting for the stone; there was also a representation on the tablet of the instruments he had used. In 1642 there was a committee of four gentlemen, all esquires, who were desired to wait on the bishop to ask his license to have a collection made to pay the charge for cutting seven poor persons for the stone. There was a similar instance of relief for Robert Hubbard and several other persons suffering from the stone. John Wrench was directed to wait on the Lord Bishop to ask his license to solicit charity from well-disposed persons in the parish of Thorpe. There was an instance given of £3 having been paid to Dr. Hagan, who cut a child for the stone. There was paid a sum of £5 in 1705 to Dr. Goodrick for cutting several persons for the stone. He (Mr. Crosse) was not able to learn what was the result of the operations in these cases. In 1706 there was mentioned another collection; and from this it would appear that the amount of the fee had increased, or perhaps the reputation of the doctor, who obtained £5 for cutting a poor child in Pockthorpe, one of the most destitute parts of the city. There was another case mentioned: Mr. Sadd, a surgeon, curing Susan Copley of cancer in the breast. Any one who could do this in our day would indeed be an acquisition—(Laughter). He would not detain them any longer, but would now call on Dr. Rankin to read the retrospective address.

Dr. Rankin then rose, and read a very long and elaborate paper, comprising a critical detail of the principal medical observations during the past year, with particular cases noticed, and remedies recommended by eminent members of the profession in all countries. Dr. Shearman, of Rotherham, was then appointed to deliver the retrospective address for 1847, and Mr. Walshe, of Worcester, was requested to deliver the retrospective address on surgery for the same year.

The next annual meeting was then appointed to be held at Derby, under the presidency of Dr. Highgate. The anniversary dinner took place in the evening, and was attended by upwards of 130 gentlemen.

MISCELLANEOUS CORRESPONDENCE.

COURTS OF SEDITION.

[To the Editor of the Medical Times.]

SIR,—In my former letters I have protested against coroners' dictation and against coroners' surgeons, but there are still many points in the Hounslow inquest left for consideration.

At the first institution of the coroner's court, the persons that first passed the dead body constituted the jury, as they were supposed best competent to judge of the cause of death. Now, however, small shopkeepers and other uneducated persons generally undertake that office.

In civil as well as in criminal cases the law recognises two juries—the common and special, the latter being employed in all cases requiring more education than ordinary, as being more competent to sift the case and return a verdict according to its true merits.

If we examine the evidence adduced at Hounslow, and divest it of all technicalities and mystifications, we find that a man was flogged, that an interval of time elapsed, and that the man fell ill and died. Upon this the jury returned the *logical* verdict of "Died from flogging."

It is quite unnecessary for me to point out the absurdity of their reasoning, for every educated or even unprejudiced person would at once perceive it, and to such a jury it would be impossible to explain it.

According, however, to such logic the jury would find all persons die of floggings (for, as children, all persons have been smacked when naughty); an interval of time elapses, they fall ill, and die.

Such is the effect of employing incompetent juries, who are led by declamation and not by fact; but it is an awful reflection for them to consider that they were sworn to inquire into the cause of death, yet that they returned a verdict contrary to fact.

The power of a dictating coroner to excite a jury is now apparent, for any coroner wishing to excite any rebellion has only to inflame the jury's mind, when the mischief may communicate to the rest of the community.

It appears that Wakley, within a very few days of the termination of the inquest, attended a meeting at Exeter-hall, where Chartists and other violent politicians were collected.

There can be no doubt that the Radical coroner thought by his sly movement that he should win the affections of the entire army, and, if he could only succeed in this object, might we not expect him to attempt to assume its command, and to issue a proclamation as its chief? The coroner's court, then, instead of being a safeguard to the subject, is being employed for revolutionary purposes; and a court of inquiry is converted into a court of sedition.

This is a novel attempt to undermine our constitution, and I call upon every Englishman to endeavour to restore the coroner's court to its pristine integrity.

I remain, Sir, your obedient servant,

A CONSTANT READER.

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted members on Friday, August 21, 1846, viz.:—C. Tipple, S. Sprigge, T. Macartney, T. M. Ward, H. Beckwith, N. G. English, G. Annis, J. J. O'Dowd, P. F. L. N. Delarue, J. Conan, L. Lodge. The court of August 21st was the last court to be held during the present session.

KIEN-LUNG, EMPEROR OF CHINA.—One day the old Kien-Lung, Emperor of China, asked George Staunton how medical men were paid in England. When the system was explained to him, he asked if there could be a single Englishman in good health? "I will tell you," he said, "how I treat my physicians. I have four to whom the care of my health is confided; a certain sum is given to each, weekly; but as soon as I am ill the salaries are stopped till I am well: I need not tell you that my illnesses are not long." By this it appears that the medical care of the celestial emperor is no joke.

STATUE TO GEOFFROY ST. HILAIRE IN HIS NATIVE TOWN.—The corporation of Etampes, the birthplace of Geoffroy St. Hilaire, have resolved to do honour to the memory of the great naturalist by erecting him a statue. Although amply supported by the French Government, and by the most eminent men of their own country, the committee wish to render the monument as honourable as possible by associating in their project the scientific men of all nations. Although Geoffroy St. Hilaire was a native of France, and although his fame is one of her proudest boasts, still the committee consider that his European reputation, as a scientific naturalist, justifies such an appeal. It is one of the privileges of science that its progress does not benefit that country only in which it takes place; and is it not, therefore, proper that all, who have enjoyed the lights of genius should come forward to do homage to it? For this reason the committee, while they desire to record as among the first the homage paid by their own countrymen, appeal equally to the lovers of science of other countries whose scientific institutions have considered it an honour to number among their members the illustrious Geoffroy de St. Hilaire. Subscriptions in aid of this worthy purpose are received by the secretaries of the Academy of Sciences, Paris.

ILLEGAL PRACTICE OF PHARMACY IN FRANCE.—At the request of the Prefect of Police, and by virtue of a special warrant from the chief of the School of Pharmacy, M. Gaultier de Claubry, a professor of that school, last week entered a drug shop in the Passage Vivienne, Paris, kept by a M. Thomas. On his arrival M. Gaultier de Claubry did not find the master of the shop, but in his place a young man who had previously been a shopboy in a bazaar, and who, from the nature of his education, could possess no knowledge of the properties of medicinal substances. It was also discovered that the preparations were seriously adulterated, and that the closet for the reception of poisons, which contained some of a very active nature, not being locked, as is required by law, was open for the use of an ignorant person whose errors might have produced the most serious consequences. An immediate seizure was made of the articles in the shop, which has since remained closed. M. Thomas has also been summoned before the tribunal of Correctional Police under the act for preventing the illegal exercise of pharmacy, because he was known to have practised without a diploma, and under that for preventing the sale of badly-prepared or damaged medicines, or the keeping of poisonous substances without the security of a lock and key. M. Thomas not obeying the summons the bench condemned him to ten days' imprisonment, and to pay a fine of 100 francs (£4).—*Gazette Medicale de Paris.*—[They manage these things better in France.]

MORTALITY TABLE.

For the Week ending Saturday, August 22, 1846.

Causes of Death.	Total.	Aver 5 summers.	years.
ALL CAUSES........	902	898	968
SPECIFIED CAUSES...	901	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases..............	258	201	188
SPORADIC DISEASES.			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat..........	105	99	104
Diseases of the Brain, Spinal Marrow, Nerves, and Senses..............	125	155	157
Diseases of the Lungs, and of the other Organs of Respiration	208	227	
Diseases of the Heart and Blood-vessels...........	26	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	99	87	72
Diseases of the Kidneys, &c.	5	6	7
Childbirth, Diseases of the Uterus, &c.	5	9	10
Rheumatism, Diseases of the Bones, Joints, &c. ...	7	6	7
Diseases of the Skin, Cellular Tissue, &c.	1	1	2
Old Age.................	33	52	67
Violence, Privation, Cold, and Intemperance.........	20	26	

No. 362. SUMMARY. Sept. 5

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

ACADEMY OF SCIENCES.

Meeting of August 24; M. Mathieu in the Chair.

Morphee and Pellagra, by Dr. Rendu.—During the course of a scientific mission into the interior of Brazil, M. Rendu had an opportunity of observing an endemic disease which he considers to present numerous analogies with pellagra. The disease is to be met with throughout the country from the Amazon River to the River Plate, and has even invaded French Guiana: age or sex affords no protection against it, and its appearance is not announced by any premonitory signs. On various parts of the body maculæ are observed, of different size and colour, and the diseased portions of the skin are immediately deprived of sensation, and of their exhaling properties. These tubercular productions of the cutis gradually increase in volume and acquire the dimensions of a pigeon's egg; they ulcerate in almost every instance. When the mucous membrane of the nose is attacked, the cartilages fall, the organ is deformed, and death is brought on by the progress of the disease towards the respiratory viscera. Muscular cramps, subsultus tendinum, formication of the extremities, and considerable increase of appetite, are also constant symptoms of this singular and, hitherto, constantly fatal malady. When the bodies are opened, besides the variable anatomical alterations to which may be traced the proximate cause of death, the brain, cerebellum, and spinal cord are always found in a marked state of atrophy, and floating in serous fluid proportioned in quantity to the diminution which the nervous centres have undergone The disease is attributed to the influence of heat and damp on persons whose alimentation is too much azotized. The manner in which the patients affected with "morphée" are treated in Brazil is not the least curious part of the account forwarded to the Institute by Dr. Rendu:—At Rio Janeiro the *bite of a rattlesnake* was prescribed,—and, having been *twice* repeated in the course of 24 hours, the patient died next day; *guano* has also been employed in the country, but without success. Dr. Rendu is of opinion that it is more the producing cause which should be modified, than the symptoms themselves, which appear incurable. We do not think, however, by his own account, that medicine has had a fair trial. By its causes, by several of its symptoms, and by the constancy of anatomical changes in the nervous centres, this disease, in Dr. Rendu's opinion, resembles closely pellagra, from which it differs in one essential point, viz., the disordered state of the digestive powers in pellagra, and their perfect preservation in morphée.

Hemicrania; by Dr. Auzias, Turenne.—According to the author, hemicrania is a headache resulting from pressure on the fifth pair of nerves, and particularly on its ophthalmic branch, by blood accumulated under the influence of various causes in the sinuses of the basis of the cranium, and especially in the cavernous sinus. Dr. Auzias considers that his theory is supported by the following deductions:—The ophthalmic branch and its ramifications are evidently the seat of hemicrania, and lie in the external wall of the cavernous sinus, separated from the blood by a very thin membrane, and exposed therefore to suffer compression from any unusual fulness of the sinus. Nausea and vomiting, the frequent companions of hemicrania, are explained in this theory by compression of the par vagum, in the foramen lacerum, or in the neck; distention of the vessels of the head, and obstruction of the venous circulation, are attested by the injection of the eye of the diseased side, and the swelling of the frontal veins—two habitual symptoms of hemicrania: the suffering is, besides, often arrested by bleeding at the nose, and increases with every pulsation of the carotid artery. In conclusion, M. Auzias recommends, for the treatment of hemicrania, revulsion on the digestive tube, by which the inferior cava may be disgorged sufficiently to permit the superior cava to abstract from the head the quantity of venous blood in excess. Dr. A. also recommends patients labouring under hemicrania to adopt certain positions calculated to facilitate the passage of the blood from the head.

Proportional Analysis of Ore, by M. Marguerritte.

Professor Dumas read the following report:—It is now some years since M. Thomson sought to obtain by the humid way, the equivalents of a large number of substances. His system consisted in the preparation, in known proportions, of solutions capable of acting upon each other in such a manner as to permit the chemist to ascertain the exact weights of the substances employed, no residue being left after the accomplishment of their reciprocal reactions. At a later period this method was applied by Professor Gay-Lussac to the precise measurement of silver in raw ore. For this purpose the learned professor showed it was sufficient to ascertain the volume of a solution of chloride of sodium necessary for the precipitation of a known quantity of alloy; hence the possibility of analysing with precision all these metals by special reactions of the same nature can readily be admitted. Thus M. Pelouze has lately proposed the use of a standard solution of a sulphuret for the detection of the weight of copper contained in a metallic compound. It is not, however, always easy to reduce the problem to such simple terms, viz., the determination of the quantities of an acid or of a basis neutralised by each other, or to the discovery of the quantities precipitated by the mutual reaction of two substances. The oxides of some metals form no neutral salts, or their deposition by re-agents gives rise to substances which leave some doubt upon the mind of the operator as to the exact time when they have attained the extreme limit of their action; such is the case with iron. Therefore it is that Mr. Marguerritte proposes to obtain its exact separation by an indirect method, *i. e.*, by the use of a solution capable of losing its colour when it yields oxygen to the protoxide of iron, thus converted into a peroxide. His plan rests upon the transformation of protosalts of iron into salts at the maximum of oxidation, under the influence of a standard solution of permanganate of potass. It is a known fact that salts of iron enjoy the property of discolouring the mineral chameleon, the purple colour of which returns only after the iron has been completely superoxidated. The quantity of discoloured permanganate of potass is in exact proportion with a given weight of the salt of iron, however rapid and easy the system of analysis. A known weight of ore is dissolved in muriatic acid; the solution is reduced to the minimum of oxidation with zinc; and the standard solution of permanganate of potass is then cautiously poured into the liquid until a slight colour is produced, and a simple proportion indicates the quantity of iron contained in the ore. This method is applicable to all cases, even where copper or arsenic is combined with the alloy;—they are first separated by zinc, and removed by filtration, after which the operation should be prosecuted as we have already stated. Professor Dumas concluded his report by moving that the Academy grant its fullest approbation to the new application made by M. Marguerritte of chemistry to commercial purposes." The report was unanimously adopted.

ACADEMY OF MEDICINE.

Meeting of August 25; M. Roche in the Chair.

The Plague.

After a short debate, in which M. Gérardin, M. Adelon, and M. Castel took part, and in which it was argued that the first conclusion could not be adopted by the Academy without involving debatable questions, the meeting came to a division on the conclusion of the first section of the report, viz.—"The plague not only arises spontaneously in Egypt, Syria, and Turkey, but has also been observed in several parts of the continents of Asia, Africa, and Europe."

The Academy rejected the conclusion. Ayes, 21; noes, 24 blank votes, 3.

Morbid Anatomy.

Professor Blandin presented in the name of M. Tosse, surgeon of the Hospital of Amiens, an interesting preparation of morbid anatomy, referring to the history of fractures. M. Tosse had been called upon to attend a case of deformity of the leg, consequent upon fracture. The limb was distorted to such a degree that the patient could not walk. Resection was performed, and a perfect union was obtained. M. Blandin laid before the Academy the portion of bone which had been removed, together with two casts representing the limb before and after the operation.

Professor Duméril observed that the father of the successful operator had, many years previously, obtained most satisfactory results from resection in a case of compound fracture of both legs. The cure had been so perfect that the learned professor had

seen the patient, a young lady, dance without any sort of difficulty of movement.

Professor Velpeau remarked that between the two cases a very important difference was to be noticed. In the case related by M. Duméril the operation had been performed very shortly after the occurrence of the accident; in the other instance the resection had another object, viz., to remedy a vicious consolidation of bone.

EBURNATION OF ARTICULAR SURFACES.

Professor Lesauvage, of Caen, a corresponding member of the Academy, presented two cases of eburnation of articular surfaces, resulting from inflammation of joints, and ulceration of their cartilaginous structures. The first preparation had been removed from the body of a prisoner at Bicêtre, who had died of another complaint quite foreign to the disease of the knee.

The second had been observed in the hip-joint of a man who had died from purulent absorption after amputation of the thigh, necessitated by compound fracture. The eburnation occupied the insertion of the inter-articular ligament, and the corresponding part of the head of the femur; before the fracture occurred the patient offered no symptom which might have led to a diagnosis of the alteration.

TREATMENT OF DERANGEMENT OF THE EXCRETION OF URINE, CAUSED BY HYPERTROPHY OF THE PROSTATE GLAND; BY A. MERCIER, M.D.

The retention and incontinence of urine, so frequent in old men, has been hitherto referred to paralysis of the urinary organs, resulting from the progress of age. Under the influence of this theory, stimulating preparations of all sorts, both internally and externally, have been recommended. Thus the tinct. lyttæ, blisters, injections of acids, of sulphurous and ferruginous waters, of very hot or very cold liquids, have been in turn prescribed. It is evident that any efforts directed towards the re-establishment of contractility of the bladder, when its urethral orifice is hermetically closed, must only tend to increase the local irritation. Permanent catheters left in the passage have, however, in some cases procured more than temporary relief, by the compression they exercise during a more or less prolonged period on the swellings, valves, and tumours, which obliterate to a certain extent the vesical orifice; but the continual pressure of the foreign body in the bladder inflames and ulcerates its mucous membrane, and becomes a cause of alteration of the urine; besides, the presence of the instrument in the urethra is not unfrequently productive of abscess and perforation. Whenever, therefore, it is possible to avoid leaving the sound permanently in the bladder, it is proper to employ another method of treatment. When hypertrophy of the prostate gland has been positively recognised, discutients of various kinds—such as salt water, calomel, corrosive sublimate, iodine—have been used, but with little or no benefit. Where advantageous results were obtained, it is to the *modus operandi*, and not to the drug, that the credit should return; thus Mr. Stafford has cured prostatic enlargements by the local application of iodine preparations; but it is evidently to the repeated passage of the bougie, and to its friction over the diseased parts, that the cure should, with more reason, be referred.

Dr. Physick, M. Leroy, and M. Tanchon have proposed various instruments for the purpose of pressing internally upon the neck of the bladder, without distending or irritating the urethra. The author, M. Mercier, recommends two instruments of his own construction—one a bent catheter; the other a straight one, with which compression of the neck of the bladder is produced when the distal orifice of the instrument is lowered. It has been, with some surgeons, an object to establish permanently a false passage through the prostate—a sort of artificial urethra, destined to replace the obstructed natural duct—but this method is a dangerous one, and is seldom followed with any permanent benefit. M. Civiale has proposed to place a ligature round the basis of prostatic tumours, or to tear them away: the former operation is impracticable; the second highly perilous. Excision of small tumours placed behind the vesical orifice is a safe and easier plan; but, in most cases, incision is sufficient, and never gives rise to any serious consequences. Eighteen patients have already been successfully treated by this method, and in fourteen cases the operation was called for by a more or less complete retention of urine. The muscular valves have always appeared to M. Mercier more easy to divide and to cure than the prostatic swellings. At any rate, whenever the radical cure cannot be attempted, the patient should be taught how to pass the catheter himself; this simple operation will in almost every case prevent retention of urine, and sometimes, by interfering with over-distention of the bladder, will permit that viscus to recover its contractile powers.

SOCIETY OF SURGERY.

Meeting of August 19, M. CHASSAIGNAC in the Chair.

DEBATE ON THE UTILITY OF SUBCUTANEOUS INCISIONS.

M. Berard was of opinion that an oblique subcutaneous wound was less exposed to suppuration than any other, because a more complete suppuration was thus produced between the wound and external objects. It was not so much to guard against the danger, so much dreaded a few years since, of the introduction of air, as to protect the parts against the suppurative inflammation. One of the circumstances which almost constantly ensures suppuration of the incision, was the suppuration of its orifice, and this orifice festered more readily in a direct than in an oblique wound. M. Malgaigne had objected that the longer the wound, the greater were the chances of the formation of pus. M. Berard would say, on the contrary, the longer the wound, the greater the chances of adhesion in some of its parts—adhesion which would protect the deep-seated portions.

M. Maisonneuve, agreeing in the main points with M. Berard, thought that atmospheric air penetrating into wounds was not always innocuous in contact with healthy parts. Air could do no injury, but when penetrating into contused wounds it might cause damage by the influence of its hygrometric and thermometric qualities. When any living fluid, blood for instance, was extravasated into the tissues, it was easily absorbed when not in contact with air; on the contrary, when this contact took place, the extravasated fluid lost its heat, and became a foreign body which nature threw off by suppuration. The larger the external wound, the more numerous would be the unfavourable chances; it was therefore advantageous to close the external wound, although it must be acknowledged this was not a constant guarantee against the suppuration of the deeper parts.

M. Malgaigne was surprised to hear it said that the fear of the penetration of air had not been the first cause of the introduction into surgery of subcutaneous incisions; observation had corrected this error. It was now known that the air being excluded, still pus might be formed, and adhesive inflammation take place in spite of the presence of air. Many surgeons, amongst whom were MM. Monod and Malgaigne, had rejected both the theory and the practice; others, M. Berard for instance, had rejected the theory but preserved the practice, and had adopted another explanation. As to the suppuration of deep-seated parts being the consequence of the suppuration of the orifice of a wound leading to them, this was a mere assertion devoid of proof; neither did M. Malgaigne believe that the solution of the problem could be found in the mortification of living fluids described by M. Maisonneuve. If that gentleman's theory were true, the larger the seat of a compound fracture, the less should be the fear of introduction of air; and yet we know that a compound fracture of the tibia is less dangerous than one of the femur. There is always a something which remains unknown in this difficult problem:—thus a wound interesting only the soft parts might readily heal by first intention, but when a bone was also concerned, as in compound fractures, amputation, &c., suppuration was always observed. Of these facts no theory furnished, as yet, any satisfactory explanation.

DAN. M'CARTHY, D. M. P.

Belgium.

CASE OF ATROPHY FOLLOWING AN INJURY OF THE RIGHT SUPERIOR MAXILLARY NERVE.—M. Vallez relates the following case in the "Journal de Medécine, de Chirurgie, et de Pharmacologie," published by the Society for the Promotion of the Medical and Natural Sciences, established at Brussels. The patient, a man aged forty, first consulted M. Vallez in the middle of August, 1845. In the previous month of May he had felt the power of vision in his right eye decrease progressively. A continual discharge of tears took place from it, changing after some time into a puriform discharge. At length, after the application of a poultice, the cornea burst with acute pain. From that time (about two months before he consulted M. Vallez) the globe of the eye by degrees became retracted. When M. Vallez first examined the patient the right eye appeared like an irregular piece of dirty chalk; it performed slight motions, especially when touched or uncovered; it was soft, and induced pain in the bottom of the orbit when pressed. The right side of the face was insensible when pricked with a needle, provided the instrument was not introduced more deeply than the skin. When the patient laughed his mouth was drawn to the left side, his tongue also was displaced towards the left side. His food did not present the same taste to him as before his disease; his smell and hearing were normal. His left eye was unaffected, though rather watery. M. Vallez, while endeavouring to discover the origin of this singular affection, noticed a cicatrix, two inches long, on the right cheek of the patient. This cicatrix followed a line drawn from the right ala of the nose to the lobe of the ear of the same side; it projected, and appeared white and indolent. The cheek of the same side was constantly pale; whilst the left cheek was considerably injected, and possessed its natural degree of heat. The patient stated that, while shaving, a friend had pushed his elbow, causing him to make the wound, which had been very deep, and from which a considerable quantity of blood had flowed. It took a month in healing. The wound took place in the commencement of March, and it was a month after its healing that the disease of the eye commenced.

*** Our readers are aware that section of the trifacial nerve, as performed by M. Magendie on animals in the interior of the cranium, always interferes with the nutrition of the eye on the corresponding side, and brings on, after a time, its destruction. Indeed, M. Serres, Dr. Abercrombie, Mr. Stanley, &c., have recorded cases in which the same results have followed the presence of tumours, compressing the trifacial within the cranium, and and thus altering its structure in the human subject. In these cases, however, the lesion of the trifacial was situated between the brain and the eye. Cases of amaurosis following lesions of the peripheral extremity of the nerve are also well known; such are produced by injury or contusion of the peripheral extremities of branches of the ophthalmic, situated in the temple or the eyebrow; this class of cases forms a distinct order in the description of amaurosis. We have not hitherto, however, on record any case, as far as we know, in which the nutrition of the globe of the eye has been disturbed in consequence of injury occurring to a part of the nerve placed between the eye and its peripheral extremity.

IMPERFORATE VAGINA—OPERATION PERMITTING THE PERFORMANCE OF THE SEXUAL FUNCTIONS.—Professor Kluyskens has published, in the "Annales de la Société de Médicine de Gand," the case of A. B., of Termonde, who was treated when seven years of age for an inflammation of the right kidney, which, after some time, was followed by an abundant discharge of purulent matter per urethram. At the age of eighteen menstruation had not made its appearance, although for the last fifteen months she had experienced acute pains in the abdomen, similar to those of colic. These came on at first at distant intervals, afterwards every month, and subsequently every fortnight. The abdomen was distended, the pulse small and frequent, and there were borborygmus, suppression of

the urinary excretion, and other hysterical symptoms. Opiates, antispasmodics, emmenagogues, and leeches to the inside of the thighs, were tried in succession, but with no good result. Sulphate of quinine was also prescribed, but to no purpose, under the impression of the case being one of masked intermittent fever. Weak and worn out by suffering, the patient at length decided on consulting Professor Verbuck, who suspected a malconformation of the sexual organs. The abdomen was as large as in an advanced stage of pregnancy, and a hard resisting tumour could be felt extending as high up as the umbilicus. The external parts of generation were properly formed, but there existed no trace of a vaginal opening. On passing a sound into the urethra, and then introducing the index finger into the rectum, nothing could be felt between these two organs but a thin fibrous cord, which occupied the place of the canal. There was no longer, therefore, any doubt as to the nature of the affection. It was, in fact, a congenital occlusion of the vagina. As death appeared inevitable unless operative means were had recourse to, M. Verbuck consulted Professor Kluyskens, who advised the formation of an artificial vagina. This being decided on, the operation was performed in the following manner:—A sound having been passed into the bladder, and forcibly raised towards the pubes, and the finger introduced into the rectum for the purpose of depressing it, the surgeon made a transverse incision of eight or ten lines in length between these two points, and these gradually, and with very great care—in order to avoid injuring either the urethra, the bladder, or the rectum—penetrated to the depth of three inches. At this stage of the operation no tumour could be discovered on the introduction of the finger, and at this moment of painful hesitation, one of the assistants, having probably before him the unfortunate case mentioned by De Haen, advised a curved trocar to be plunged into the uterus through the rectum, in order to evacuate this viscus and palliate the symptoms. This advice, however, was not followed, and it was decided to continue the operation, when, on extending the incision to about an inch in depth, the presence of a tumour formed by the distended uterus was ascertained; but it was evident that there existed no trace whatever of a neck or os tincæ. This was the critical moment of the operation, which was borne with great fortitude by the patient. Professor Kluyskens, after having well satisfied himself of the position of this tumour, plunged into it the point of a long-bladed bistoury, covered to the extent of two-thirds with linen, and made a large opening in it. An immediate discharge of about five pints of viscid blood, having a faint odour, took place, whereupon the distention of the abdomen subsided. Some warm water was then injected a few times into the uterus, and the patient immediately placed in a bath. About ten days afterwards inflammatory symptoms appeared, and caused a fear of an acute attack of metritis; fortunately, however, they yielded to antiphlogistic means, particularly a frequent repetition of warm baths. After some little time a gum-elastic canula was occasionally introduced into this artificial canal, and the cure was complete at the end of five weeks. Since then several years have elapsed, and the artificial canal has still existed; the patient has enjoyed good health, her menses have appeared regularly, though suddenly, and without pain; but there has existed in the intervals a rather abundant leucorrhœa. Mademoiselle A. B—— has since married, but had had no children when the above was written.

Ireland.

Treatment of Uterine Polypi and Ulceration.—Dr. Montgomery has published, in the "Dublin Quarterly Journal of Medical Science," a very interesting paper on Uterine Polypus, which was read before the Dublin Obstetrical Society. During the year 1845, Dr. Montgomery operated seven times for ordinary benign polypus, and once for a malignant polypoid growth of the cauliflower excrescence kind, viz., three times by ligature, three times by torsion, once by excision, and once by caustic. All the cases of benign polypi did well. In that of cauliflower excrescence, the operation by ligature was eminently useful, but the disease returned, and the patient refused further interference. Dr. Montgomery calls attention to the fact that polypus, even when of very small size, is frequently accompanied by ulceration of the labia of the os uteri; these ulcerations are, he believes, in general produced by the polypus, or owe their existence to its formation, rather than to the operation for its removal, which, however, may occasionally produce such an effect; they will sometimes heal without treatment on the removal of the polypus, but, as frequently, they will not: it should, therefore, be a rule to examine such cases with the speculum before they are pronounced quite well, lest the patient should only be cured of one-half her disease, and left to the consequences of the other. In the case on which Dr. Montgomery operated by excision, considerable hemorrhage took place (although the pedicle was of small size, and its division had been effected by scissors), which was arrested with difficulty. Dr. Montgomery also mentions a case in which Dr. Kennedy had seen the division by the knife, of the pedicle of a polypus, not thicker than a common quill, followed by such an amount of hemorrhage, as to endanger the patient's life. Dr. Montgomery also calls attention to the shrinking of the pedicle of a polypus of the fibrous kind, as it may be the cause of the hemorrhage which sometimes follows excision, especially of large polypi, even where the precaution has been taken of firmly tying the pedicle before dividing it. The pedicle, thus shrinking in, slips away from the ligature, which virtually becomes loose, and of course ceases to exert any pressure on the blood-vessels, which then pour out their blood, just in the same way as not unfrequently happens with the umbilical cord of the new-born infant. Two cases in which this happened have come under Dr. Montgomery's notice, in one of which the patient died within a few hours after the division of the pedicle; although, from the skill and experience of the operator, Dr. M. is persuaded that every requisite precaution was taken. Dr. Montgomery has altogether operated on thirty instances of this disease; out of which the removal of the tumour was effected,—in three cases by excision, two by caustic, nine by torsion, one by ergot, and fifteen by ligature. In two other cases the polypus was destroyed accidentally,—once during labour, and once by the action of the expanding speculum. The instrument which Dr. Montgomery always used for applying the ligature is the double moveable canula of Niessens, and he has never yet met with a case which was not manageable by its means. The ligature which he prefers to all others, and which he always uses, is silk salmon fishing-line, prepared by soaking it in linseed oil, in which state it combines the necessary qualities of great strength, perfect pliability and softness, and remaining unaffected by moisture. The forceps, which are very useful for twisting off small polypi, consist of a straight stem about eight inches long, set in a handle; at the extremity of the stem are two short spring-blades, with serrated tips, upon which slides a brace moveable from the handle, by which they are easily pressed firmly together, and made to grasp very securely any object caught between them. Of the thirty cases operated on, one only terminated fatally, which, considering the wretched condition in which many of the patients were at the time of the operation, and some of them for months or years before it, is an encouraging and satisfactory result; but it should not be forgotten that the cure of polypus of long standing, and accompanied with large discharges, is, under certain circumstances, associated with a risk which claims careful consideration. Experience shows, that if a woman has for many years laboured under polypus, with constant and large discharges, and if she be naturally of a full habit and inclined to good living, and especially if she be of such an age that, after the removal of the disease, menstruation is not likely to recur, there will be danger of determination to the head, as in other cases of suddenly-suppressed discharges; and it will, therefore, be the duty of the medical attendant to prescribe such a carefully-regulated system of diet and medicine as he will deem best suited to prevent the occurrence of plethora and cerebral congestion, which Dr. Montgomery has seen take place fatally, under such a combination of circumstances. From Dr. Montgomery's cases and remarks it may be collected:—That very small uterine polypi, or polypoid excrescences, are of frequent occurrence. That they are often not discoverable by touch alone, and so escape notice. That they may even elude detection with the speculum, especially if the instrument used is not capable of separating the lips of the os uteri. That they are a common cause of ulceration and menorrhagia, one or both; the cure of which requires, as a preliminary step, the removal of the polypus. That while thus, on the one hand, a small polypus may escape detection, there is, on the other hand, a peculiar condition of the anterior lip of the os uteri liable to be mistaken for a polypus, and requiring a long time for its removal. That the very small polypus of the os uteri is seldom solitary, and, in common with polypi of other kinds, is very often combined with other diseases of the uterus, especially with fibrous tumour. That these small polypi of the os uteri, when occurring in women of advanced age, especially if they are of the vesicular kind, are often the precursors of a malignant form of uterine disease. That polypus being very frequently accompanied by ulceration of the os and cervix uteri, and its concomitant pain and structural alteration, the symptoms are occasionally mistaken for those of cancer; which error is most likely to be committed if an examination should happen to be made just when a polypus of rather large size is passing through, but still engaged in, and distending the os uteri. That in cases of larger-sized polypi, ligature is the means most generally eligible, as being safer than excision, though not so expeditious; its application having, in general, the immediate effect of restraining the morbid discharges, and alleviating other symptoms, and ultimately curing the disease. That polypi and polypoid excrescences of small size are best removed by torsion; or in some instances their destruction may be conveniently effected by caustic. That with large polypi torsion is unsafe and should not be attempted. That even with a polypus of small bulk, and slender pedicle, excision is not free from the risk of troublesome hemorrhage, while with those of large size there is great reason to apprehend such an occurrence taking place to a very dangerous degree, even though the precaution may have been taken of firmly constricting the pedicle with a ligature previous to its division. That in ordinary cases of benign polypus, when no other disease exists in the uterus, the removal of the tumour by ligature, or other suitable means, is, in the vast majority of cases, completely successful, even under circumstances apparently quite hopeless. That in malignant growths, such as cauliflower excrescence, removal by ligature will sometimes effect a complete cure; and that, where the success is not so decided, much good may be done by the operation. That the situation from which a polypus springs makes a considerable difference in the symptoms which it produces: a polypus of the lip of the os uteri giving rise to fewer symptoms and much less discharge than one of very inferior size growing from any part within the os uteri. That a polypus of only moderate size growing from the lip of the os uteri is not likely to interfere injuriously with gestation or delivery, and its removal may be effected by, or as a consequence of, the pressure which it sustains during the expulsion of the child. That if a polypus, already detached, be too large to pass readily out of the vagina, it ought not to be allowed to remain there; but should be removed with the least possible delay, as its putrefaction may be attended with very unpleasant consequences. That a fibrous tumour originally formed in the substance of the uterus may thence descend, pass through the os uteri, and form an ordinary pediculated polypus in the vagina. That in the unimpregnated state of the uterus, this change will be effected gradually, and in general very slowly; but that, should pregnancy occur, the descent and expulsion of the tumour may take place quickly under the expulsive action of labour. That a polypus, even of large size, may thus make its appearance for the first time, immediately after delivery, no suspicion having

been previously entertained of its existence. That the cure of long-standing polypus, with large discharges, is liable to be followed by a condition of the system requiring precautions against determination to the head.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XXII.

APHTHA.

According to Willan and others.

GENUS.	SPECIES.
Aphtha.	A. Lactantium.
	A Adultorum.
	A. Anginosa.

As proposed by Startin.

GENUS AND SPECIES.

APHTHA.		
A. Alba vel simplex.	Localis.	Sparsa.
A. Luteola.		Conferta.
A. Ulcerosa.	Pluri-localis	Inveterata.
A. Gangrenosa.		

Hitherto, gentlemen, these lectures on the chronic affections of the human dermis have been demonstrative, from the circumstance of the diseases described being placed on the surface of the body, and thus giving access to the handicraft of the modeller. Aphtha (or the thrush, as the affection is popularly called), to which I have now to request your attention, from its constant and invariable situation on those inflected portions of the skin which line the different openings of the body, must depend entirely upon my descriptive powers—a manifest disadvantage, but one that is insuperable, from the position of the disease.

The thrush may be an idiopathic or symptomatic manifestation: in the former case, it is, I believe, confined to infant life; in the latter, adults may be the subjects of its attacks. In every instance the mouth is to be regarded as the chief seat of the disease, though other internal parts, even to the extent of the whole intestinal canal, may in severe and rare cases be more or less implicated: from this cause aphtha has been discarded from the consideration of many writers on diseases of the skin, as not appertaining to that department of medicine; Willan, however, included the complaint in his erudite dissertation, and I am content to follow, humbly enough, in the footsteps of so able and excellent a master. I shall, therefore define *aphtha* to be an eruptive disease, on those inflected portions of the human skin lining the mouth and other passages, which consists primarily in an erythematous inflammation of the part affected, and is followed by the appearance of small white or pearl-coloured and sometimes yellowish vesicles, that quickly break and demonstrate white or yellowish depositions, resembling milk curd or false membranes on the affected parts, the morbid phenomena disappearing, and the diseased portions of the inflected skin resuming their healthy aspect, after an uncertain but brief period, though occasionally the aphtha may terminate in ulcerations and gangrene.

This exceedingly common disease, at least during the first periods of human existence—that of lactation—is very constantly, from its usually unimportant nature, delivered over to the cares of the nurse, by the consent of both parent and medical attendant; it is only in its severe manifestations that it claims the assistance of our profession. Its origin in most instances may be traced to some few days' previous indisposition; in fact, it may be said in this respect to resemble herpes of the lips, as described in the last lecture, and from this complaint, when it extends within any openings of the body, aphtha in its early stages is not to be distinguished; the difference, however, becomes obvious enough as the affection assumes the characteristic which I have endeavoured to signalize in its arrangement on the chart, to which I beg to direct your attention. You will perceive that I have again ventured to deviate from the established routine; this, as in all former instances, has arisen, not from a desire to introduce novel views, but from a wish to bring forward a classification of the subject, which in itself might be a sort of language indicative of the precise position and manifestations of the disease. Thus the GENUS APHTHA is comprised under four species, named from their manifestations: — *A. alba vel simplex*, white or simple aphtha; *A. luteola*, yellowish aphtha; *A. ulcerosa*, ulcerated aphtha; and *A gangrenosa*, gangrenous aphtha,—all of which may have a local or more extensive existence, and appear in a scattered, confluent, or inveterate form or variety.

I shall detain you but a very short time with a brief description of these species. *A. simplex* or *alba*, whether idiopathic or symptomatic, is manifested by more or less inflammation, heat, and redness of the lining of the lips, cheeks, or fauces, and of the skin of the tongue, on all or any one of which parts the complaint may be situated; to this inflammation succeeds an eruption of small flattened vesicles filled with a milky fluid, which gives them a white or pearly appearance. A few hours is mostly the duration of these vesicles, when they break, leaving a superficial excoriation of greater or less extent according as the eruption has been scattered or confluent; this diseased surface next becomes covered with coagulated lymph, giving the appearance either of curd or false membrane, as mentioned in the definition; so close is the first resemblance in some cases that the aphtha of infants has been deemed by certain authors to have its origin from allowing the child to *sleep* with a portion of milk in its mouth unswallowed. I need scarcely remark that this is an absurd supposition, arising in all probability from a resemblance found to the appearances described, added to an inaccurate examination of the affected parts; for it is certain that most babes are found to sleep at the breast under the circumstances specified, and this without the least derangement of their health The whole progress of aphtha alba does not usually continue more than ten days or a fortnight before its final disappearance; and perhaps, in every case, if its commencement be attentively watched, a few days' indisposition or more or less general disorder of the system will be found to precede it, acidity of the primæ viæ being constantly a concomitant symptom. It is also worthy of notice that the eruptions of the vesicles are successive, commencing in the same manner whether the complaint be idiopathic or symptomatic, and that every part of the mouth and fauces, or the whole alimentary canal, may be invaded—the disease showing itself in some new situation as the healing process is completed on that it lately occupied.

This constitutes the inveterate form of the malady, which, when fairly established, must be referred to the next species designated on the chart *A. luteola*, which, on its first appearance, does not differ in any important particular from the simple species of the disease; but the vesicles rapidly become confluent and assume a yellowish hue, extending all over the mouth and into the pharynx, œsophagus, and probably through the alimentary canal, as vomiting and diarrhœa are the very constant attendants on the disease.

At the close of bilious fevers in the adult this state of things is not unfrequently witnessed, as also after erysipelas, measles, &c.; and it is the pest of the wards of hospitals appropriated to sick children and lying-in women, who are closely congregated and breathe a vitiated atmosphere. In the asylum for foundlings, the ("Enfans Trouvés") and the hospital for sick children ("Enfans Malades"), at Paris, this form of aphtha is to be witnessed in all its malignity, and often decimates its victims. It would appear to be epidemic in such localities; and authorities of repute are not wanting who consider it, under such circumstances, contagious or infectious, or both. The vesicles of aphtha luteola are much more apt to degenerate into ulcerations and sloughing or gangrene, than in the white species I have already described; it is also to be very generally regarded as a symptomatic affection supervening for the most part in children badly nourished and nursed; or in adults who have been reduced by lingering diseases, or by long courses of medicine. In fevers it would appear occasionally to be deservedly considered as a *critical eruption*, which, when of a livid or black hue (the *aphtha maligna* of Sauvages), is to be deemed unfavourable, and *vice versa*. The surface of the body is not unfrequently affected with petechiæ or miliary eruptions in these severe cases of aphtha; and marasmus, or cachexy of some kind, is its usual complication.

The third and fourth species of aphtha on the chart (*A. ulcerosa* and *A. gangrenosa*) are merely terminations of the last-mentioned or first-described species; their name sufficiently indicates their nature, and is adopted only for the sake of precision in describing the particular stage of the complaint. I must observe, however, that ulcerations are by no means common in aphtha, when uncomplicated with syphilis or scrofula, and that gangrene is still less so; when they do occur so as to constitute *A. ulcerosa*, the disease runs through its vesicular form in the usual manner, though a greater degree of attendant erythema or inflammation may be observed; and in the place of a superficial layer of coagulable lymph covering the spots occupied by the eruption, a tenacious slough, of a yellow or darker hue, is witnessed, which extends more or less deeply into the parts on which it is situated, and enlarges laterally much beyond the space it first attacked. These sloughs separate slowly, leaving ulcers of irregular depths, filled with loose granulations, which, as the parties affected are in bad health, heal slowly, and are very prone to bleed or assume a black gangrenous aspect (*A. gangrenosa*), which may resist all measures for its relief: a circumstance perchance less owing to the nature than to the position of the disease, which prevents or impedes deglutition, so that food or medicine can be administered only under the most disadvantageous circumstances, or not at all.

From the foregoing remarks I should hope no difficulty could occur in the diagnosis of aphtha, which indeed resembles no other disease when situated in the mouth; but I have seen this complaint, within and around the margin of the anus and pudendum, both in children and adults, present an aspect which might occasion it to be mistaken for eczema; the constitutional symptoms, and particularly the coexistence of the aphtha in the mouth, will furnish the necessary distinctions between one case and the other.

With respect to the treatment necessary, soothing palliative measures are the only local indications; to which, for the purpose of cleansing the parts, slight astringent remedies may be superadded, the best being the mel. boracis of the nursery, or raspberry vinegar properly diluted. In cases of gangrene more powerful remedies may be required, as advised for rupia escharotica; nitric acid, more or less diluted, and the oxymel æruginis of the old Pharmacopœia, being required. I have also found a wash composed of sesquicarbonate of soda and a few grains of borax, suspended in a little yolk of egg and water, in the proportion of four or five grains of soda and one or two of borax to each ounce of fluid, very useful where much acidity was evident either in the breath or secretions—a fact easily ascertainable by the use of a slip of litmus paper. The internal remedies should be chiefly alkaline, as mildly aperient magnesia, soda, or liq. potassæ combined with rhubarb; or infusion of senna, with the addition of a little hyoscyamus, syrup of poppies, or laudanum, being mostly required. Of course each case will call for some slight deviation from any given rule, and the advanced or inveterate forms of aphtha, dependent on constitutional causes, must be treated according to general principles, which I have no need to detail. Diarrhœa and vomiting, so frequently the attendants on these cases, I have found more readily restrained by the compound powder of kino, administered in doses proportioned to the age and condition of the patient, both by the mouth and by way of enema, than by any other remedy; and I have constantly experienced the advantage of using the blanket bath, as it has been termed, to the infantile sufferers from this disease, where visceral disorder may be existing—the determination to the skin produced by this simple agent being such as to render it a very important and always available means in the treatment of many

internal maladies; indeed, in the hands of *another Priessnitz*, it might, like hydropathy, become a panacea for all the ills that flesh is heir to, without half the inconvenience, and with all the benefit, attached to that extraordinary revival by a German uneducated peasant, of disused medical expedients.

The mode I usually recommend in applying the "*blanket bath*," is to wring a new blanket out of water at 98 to 100 degrees of Fahrenheit, until no more liquid can be expressed by using moderate force; this is to be done at the bedside of the patient, who lies in his night-dress upon a double dry blanket, ready to be enveloped in that which has been prepared, the steaming hot woollen is next passed around his person, and the wh[illegible] covered by folding the double dry blanket in such a manner as to leave room for free inspiration only, whilst all moisture is kept from the bed. I can assure you that, if this simple expedient were more generally practised, the expensive and cumbersome warm and vapour baths, in present use, might be almost abolished, as it will be surprising to those who have never witnessed the process that so considerable a degree of heat can be thus applied, and kept up, with little or comparative fatigue to the patient.

I shall not longer detain you by a recital of any case of aphtha, as I have entered so fully into the remedial measures to be adopted; and I will not waste your time by a recapitulation of the application of general principles to any selected instance of so common an affection, in its simple and ordinary forms, but rather fill up that portion of the allotted time which to-day remains to us by briefly reviewing the series of chronic cutaneous diseases to which the complaint last under our notice would seem to form a break or boundary (inasmuch as it is the last to be mentioned, having the *constant* distinctive marks of eruptions attended with discharges,) before we enter upon the consideration of the rashes, which have but a slender connection, either apparent or real, with those maladies which have hitherto engrossed our attention.

It will have been observed by those who have done me the honour of attending these lectures, that the diseases we have considered, like the *beau-idéal* of a sliding scale, so often adverted to in modern times, have appeared progressively to lapse one into the other; the precise boundary line, where one ended and the other began, either as a distinct genus or some one individual variety, being as undefinable as the colours in a prism. Thus, if I briefly recapitulate, we have seen, that *lepra*, *psoriasis*, and *pityriasis* are nearly identical affections, both in their nature and treatment; that pityriasis alphos congenita, a species of the last disease, is the connecting link with *ichthyosis simplex*, which again becomes [illegible]he bond of union between that complaint and [illegible]onic *impetigo* and *eczema*; the latter of which diseases occasionally runs into *lichen* or *strophulus*, both of which after terminate in *prurigo*, and sometimes in *porrigo*. The next affection we then arrive at is *scabies*, which may assume the type of nearly all the preceding genera, or some of their varieties; indeed nearly all the appearances assumed by chronic inflammations of the skin may be simulated by this complaint, which has been demonstrated to arise from a single source of irritation produced by the small insect entomologists have designated the *acarus scabiei*. *Acne* and *sycosis*, the next maladies which engaged our notice, it will be remembered, resembled scabies in the presence of a microscopic animalcule, the *acarus folliculorum*, whilst they have also a marked similarity in appearance to some varieties of impetigo or porrigo; and in a species of sycosis, attended with indurations and ulcerations, (sycosis ulcerata), a resemblance to the next mentioned diseases (*ecthyma* and *rupia*) may be traced, which maladies in their vesicular stages would seem to lapse into *pompholyx* or *pemphigus*; and these again merge into *miliaria* or *sudamina*. The next diseases on our chart, *herpes* and *aphtha*, furnish a striking group, which, whilst resembling some varieties of the pemphigus genus, yet are closely connected together in the different phases of their existence, as also in their nature and in the treatment required.

In illustration of what I have now said in so many words, I have only to point to the waxen models arranged on the table before you, in the series and order mentioned; and I beg you will observe that these are no pictures made up for effect, in which often the imagination of the artist and the vivid tints of his pencil seem to vie with each other in their attempts to pictorialize nature; but that they are faithful casts from patients attending this institution whose diseases you have constantly had the opportunity of witnessing and comparing with their waxen representations; and I think, in the plurality of examples, you have also seen the case when a cure has been accomplished. When such a tableau from the book of life as this is spread before you, how easy appears the lesson to be learned from it, and how futile the doctrines of those dermatologists who would found a knowledge of cutaneous diseases either upon the scales, vesicles, pustules, &c., apparent during some stage or other of the complaints they describe; as also of those authors who have founded their arrangements upon the complex anatomical structure of the skin, which I do not recollect as furnishing a single example of uncombined inflammation, solely affecting that portion of the dermis on which their nomenclature, arrangement, and treatment of its diseases have been based. But I have now said enough, gentlemen, in ratification of the promise given at the last lecture, to show you the grounds upon which I have introduced the practical divisions proposed in this still complicated subject, whilst I have assigned a reason for the arrangement observed which I trust you will allow has been influenced by practical considerations, not only as regards the appearance of the several diseases, but also as respects their therapeutic management.

The diseases of the cutaneous surface that I intend shall next engross our attention—*urticaria*, *roseola*, *œdema*, and *erysipelas*—form, as will be seen, a second series, or group apart, having but little traceable affinity with any of the foregoing affections—that is to say, when observed separately from any accidental complications with the diseases with which a comparison may be instituted. Throughout the whole of this group you will look in vain for abnormal products of inflammatory action; that is to say, for *scales*, *pimples*, *pustules*, or *crusts*; but, instead, you will commonly witness the more ordinary consequences of common inflammation, *heat*, *redness*, and *swelling*, in most instances ending in resolution as it is termed, but occasionally in the two last-mentioned genera, manifesting suppuration and the other usual results of the inordinate actions of the vessels of the part. May I beg that you will not forget the distinction I have here thus ventured to make, not only that you may better understand my future remarks, but also that they may assist you in directing your diagnosis and treatment of the diseases we have hitherto considered; for you will have observed that not only does each complaint, as it were, lapse into that which follows it, but that the therapeutic management of the two affections becomes identical in some one stage of their existence.

I shall conclude these observations, gentlemen, by the announcement that next week I purpose giving you a description of the first-mentioned disease of the new series before mentioned, which is known by the designation of *Urticaria*, or the nettle-rash. I beg you will not leave the room, however, without taking a parting glance of the models we have just rapidly reviewed, if only to satisfy yourselves that as far as they are concerned my observations have ocular demonstration and seeming truth on their side.

A serious disease, which rages at present among children, has within a few weeks made frightful ravages at Orleans. The ordinary degree of mortality of children is at the utmost eight weekly, but since the middle of July this mortality has increased in an alarming degree. From the 10th to the 17th July, 15 children under seven years of age died; from the 17th to the 24th, 17; from the 24th to the 31st, 18; from the 1st Aug. to the 7th, 21; and from the 7th to the 14th the alarming number of 30 deaths occurred.

The Nature, Causes, and Treatment of Mental Diseases.

By M. PINEL, M.D., Member of the Academy of Medicine, formerly Physician to the Bicêtre and Salpêtrière Asylums, Author of the "Traité Médico-Philosophique sur l'Aliénation Mentale," "Médicine Clinique," "Nosographie Philosophique," &c. &c. Translated, with Notes, Illustrative of some important Doctrines in Physiology, Phrenology, and Moral Education,

BY DR. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopedia of Practical Surgery, &c.

TREATMENT OF CEREBRAL DISEASES.

The treatment of cerebral diseases is divided into the therapeutic, moral, and hygienic. The therapeutic comprehends all medication calculated to combat diseases of the brain, especially at their commencement, to prevent their passing into incurability, and to the fatal complications that are soon superadded; and to discover the best indications of cure of their numerous and formidable symptoms. This treatment must be conducted with greater activity than has been usually employed hitherto, if we mean to prevent almost all the diseases of the brain from degenerating into incurable alterations and complications.

The functional or moral treatment, or the treatment of ideas by other ideas and emotions, is applied with success to all cases of chronic and partial delirium; to monomanias of superstition or vanity, in which the brain, having experienced some slight lesion at a former period, continues to *unreason* through the mere force of habit, or for want of occupation. Patients of this kind are as frequent in crowded asylums as in the independent classes of society.

The hygienic treatment especially concerns the insane whose disease imposes the necessity of complete isolation—those, in a word, who require to be placed in the material conditions most favourable to their position and interests; and hence the necessity of taking hygienic rules into consideration as regards the plan and division of the buildings, and their special appropriation to the paralytic, epileptic, as well as in reference to diet, exercise by labour, and the rules of administration by which establishments for the reception of the insane ought to be governed.

Therapeutic Treatment.

In order to treat a disease methodically it is necessary to know its seat and nature, to consider the mode of action of its causes, and to take into account the individual dispositions as to age, sex, and constitution.

At the present day, when the most searching investigations are made after pathological data, an empirical medication—that is, a provisional medication of symptoms—loses credit more and more. It is felt that we must not stop short at the secondary effects, but that we must attack the mischief at its source, and, in the cases where our knowledge does not yet enable us to act rationally, that we must order our conduct according to the rules of prudence, and above all that we are not to incur the risk of employing remedies more dangerous than the disease itself.

If, therefore, it be useful in the first instance to know the seat of a disease, it is not less so to be able to appreciate the mode of alteration, the diseased state of the organ, with a view to employing the best means for its cure. These principles are of the highest importance in their application to the treatment for cerebral affections; and our action should be directed not so much to the general symptoms as to the anatomical charac[illegible] which the diseases present. In all morbid a[illegible]s the general characters belong to constant ty[illegible] which are almost always the same whatever may be their seat, and in which the curative indications require almost always the same order of means. [illegible]s, the alterations of the brain are observed under two grand general forms, the acute and chronic. It is in these two states that we have to consider them, applying to the different affections which constitute them the best and most direct therapeutic means.

We shall, therefore, have to examine in succession the numerous cerebral affections that present

themselves with characters of inflammatory irritation, and to point out the treatment that seems to us most appropriate to each of them.

In this first form, which comprehends the commencement of almost all cerebral affections, two general but opposite indications present themselves —the plethoric state, or state of hyperemia; and the state of debility, anemia, or atony.

The plenitude of the sanguineous system is very frequent in acute diseases of the brain; young persons, naturally vigorous and sanguine, and women at the critical age, are very prone to these affections. Hyperemia is recognised by the fulness and frequency of the pulse, by a general sense of weight, and by injection and swelling of the superficial veins. But what is very remarkable, confirmed as it has been by numberless observations, is, that this excess of blood often, instead of augmenting the acuteness of the cerebral symptoms, seems to still and calm them. Although the curative indication be to unload the sanguineous system, recourse must be had to depletion with extreme reserve. I have seen at the Salpetriere females, who had been treated in other hospitals for a passing delirium, brought in in the state of furor from the abundant blood-lettings that had been employed.

The quantity of blood to be abstracted at one or two bleedings is a matter of importance, and must be determined by several circumstances that call for the medical man's best attention. He must take into account the strength and age, judging by the effect of the first bleeding whether a second ought to be had recourse to; in females, who almost always experience a suppression in such attacks, leeches should be employed, or the vein of the foot opened. We often find that the only effect of the bleedings is to diminish the state of hyperemia, and that the intellectual disturbance persists with the same degree of intensity notwithstanding. As long as the hyperemic state continues, tepid bathing ought to be avoided, as it is apt to produce congestion in the head or lungs.

Anemic debility is characterised by paleness, emaciations, general weakness, and frequent small pulse; notwithstanding this asthenic state, the cerebral symptoms exhibit extreme violence, or the delirium is calm with continual loquacity. This febrile anemia arises from various causes. Sometimes it begins with the cerebral affection, or even precedes it, as is the case when it occurs in persons who fall slowly into a state of destitution, or who refuse food, or are addicted to masturbation; sometimes it is the consequence of an over severe antiphlogistic treatment.

The causes and effects are here so evident that the necessity of restoring the strength, of giving new energy to the organs, and of obviating debility becomes manifest. Persons in whom anemia is a consequence of destitution and want of food, generally get well rapidly; with a gradually-restored alimentation, and cleanliness in all that surrounds them, strength is soon recovered, and the brain, like the rest of the organism, resumes the full exercise of its functions. When the anemia is the consequence of too abundant bleeding, recovery is slower and more difficult; the patients remain for a long time pale, languid, and listless, and chronic delirium or dementy almost always follows the treatment employed. Their food should be substantial and abundant, frequently given, and in small quantities; and tonic medicines, more especially preparations of iron, will be proper. When the anemia originates in masturbation it is extremely difficult to cure, especially in women; some of them addict themselves to it with incredible fury, and the inevitable consequence of the fatal habit is demency, marasm, and phthisis. The strait waistcoat will answer for prevention in males, but women have a thousand ways of procuring the excitement by friction. The best thing we can do is to combat the irritation of the genital organs by warm baths, cooling drinks, and, above all, by bodily exercise pushed to a degree of fatigue.

After these general indications, derived from the state of strength or debility of the patient, we must discover the therapeutic indications which each disease presents considered by itself.

Acute delirium being generally of short duration, its cure is often spontaneous, or may be promoted by rest and regimen only. But when the symptoms are more severe, large bleedings must be employed, together with counter-irritation to the feet, abundant diluents, and vomiting and purging may also be necessary. In delirium from intemperance in drink, coffee, ether, spirit of ammonia in doses of six or twelve drops, are given with success; the mindererus' spirit may be used instead of the spirit of ammonia, as it can be given in larger doses. As delirium is always an unfavourable predisposition as regards relapse, as well as the development of other more serious affections of the brain, we must not hesitate to adopt a more protracted and severe treatment than the transient nature of the delirium requires.

Mania, Maniacal Furor.—In a physiological point of view, one might suppose that emissions of blood would at once disgongest the brain, and calm the symptoms. When amendment is so procured, it lasts but a short time, and the symptoms of excitement recur almost always. Recourse must be had to sanguineous evacuations only in the cases manifestly requiring it—when the symptoms of congestion are obvious, the face being flushed, and the pulse hard and frequent. In insane females leeches may be applied, when the catamenia are suppressed, to the thighs at the approach of the menstrual period; and the more so, as there is at this time a general exacerbation of the symptoms. The mode of letting blood may be varied: at the commencement, bleeding at the arm, jugular vein, or temporal artery, ought to be preferred; when the disease has lasted for some time, blood will be best abstracted by leeches, especially when the patient is much weakened, as well as by cupping at the nape, on the thighs, or over the region of the heart.

To assist the effect of blood-letting, prolonged tepid baths may be advantageously employed, the head being, at the same, kept cool with cold water applied by aspersion or by means of a wet napkin. Cold baths and douches may also be used, but with the precaution which the state of important organs may require, and as a means of intimidation and discipline. The female patients support the cold douche better than the males. It should not, however, be continued beyond a minute or two, as it causes great suffering to some patients, and if prolonged may give rise to pulmonary or intestinal congestion. Good effects are obtained from pouring a slender jet of water on the head, or by directing it drop by drop, the patient being properly secured in bed. The application of ice also is an excellent means of calming cerebral irritation.

From remote antiquity it has been observed that when diarrhœa takes place during an attack of mania, it produces a very favourable effect on the disease; this suggested the propriety of employing purgatives. In this respect hellebore has been for ages regarded almost as a specific. This violent purgative, however, is now no longer employed. Purgatives may be employed to act at once by a single dose, or in small doses at short intervals; calomel or croton oil answer very well. In acute mania, active remedies require to be used with circumspection, as the intestinal mucous membrane then shares in the general susceptibility. It is only when the nervous action is suspended or abolished that we act more boldly. Cooling diluents, as the decoction of chicory, whey, emulsions, decoction of tamarinds, castor oil, and tartar emetic in small doses administered in gum-water, are in addition the best means to obtain a sufficient revulsion.

Tartar emetic has been highly extolled, and I have employed it often in large doses at the Bicêtre without producing any remarkable effect, even in the dose of twelve grains, and it produced neither stools nor vomiting. The cases in which it has been most useful are those of slight melancholia, or hysteria in nervous women; in small doses it gives rise to obscure, continual perturbations, which are always followed by amendment.

Camphor has been employed in large doses by Bosquillon at the Hotel-Dieu, conjointly with blood-letting unstinted, but without any better success than that obtained by other modes of treatment. Opium, which excites more than it alms, as well as calomel, so much employed in England and America, have also been favourably spoke of. As means of action against the organic cause that gives rise to the acute symptoms in the brain, all these remedies cannot be regarded as very rational.

What we should aim chiefly at favouring in maniaure, cutaneous eruptions, diarrhœa, menstruation, hemorrhoids, perspirations,—in a word, all physiological derivations which must of necessity influence the state of the brain. It is also in this view that exutories are useful towards the decline of the attack, and that the suppuration should be kept up abundantly and for a long time. Large blisters to the back will be found an equivalent for critical evacuations that are too long retarded.

When the patient has illusions, we must first ascertain if the organ, the seat of them, be healthy, as they may yield to treatment applied to the organ itself; in illusions of hearing, small plugs of cotton, powdered with caustic potass or moistened with laudanum, are employed successfully; we may act even still more efficaciously by applying cupping glasses on the mastoid process. In illusions of sight, we can act efficaciously on the optic tracts by small doses of belladonna, graduating the dose from a quarter to half a grain: larger doses would give rise to false perceptions of sight, even in persons in perfect health.

Sanguineous Congestion.—It is in the state of congestion, more particularly, that large blood-lettings produce the happiest effects, and may alone dispel, at once, headache, vertigo, noises in the ears, and numbness in the limbs. When the congestion is extreme this will not always be the case, and often, after repeated large bleedings, the symptoms are in no way abated, or, if they cease for awhile, it is only to return with greater intensity. We should prefer at all events general bleeding to leeching, unless particular indications require an application of leeches to the neck, spine, or anus.

In the first stage of insanity there is a cerebral irritation which is characterized by injection of the capillaries of the face, eyes, and even the scalp; by the swelling of the veins of the neck (the jugulars are sometimes enormous) by the throbbing of the carotids and temporals, and by great heat in the head. This cerebral congestion is particularly observed in the maniacal, monomaniacal, melancholic, and at the commencement of general paralysis. In these cases, as in all congestions, we must combat the cerebral irritation, by preventing a too great flow of blood to the head, and by exciting, by means of derivatives, an irritation or fresh secretions in a distant organ: derivatives, combined with the application of ice on the head, effect this purpose. The intestinal canal will be excited by purgatives, continued for ten, fifteen, or twenty days. Tartar emetic in the dose of one or two grains, in barley-water, chicory-water, or whey, is active without being injurious; it nauseates the stomach, while it stimulates the rest of the intestinal canal. Calomel in small doses possesses the same advantage, but it readily produces salivation in some persons. In extreme cases, drastics may be had recourse to. If the cerebral irritation persist, after the continued employment of these means, one or two blisters should be applied to the arms, legs, and, more rarely, to the nucha.

Cerebral Inflammation.—It is necessary to unload the vessels of the brain by the application of leeches and cupping at the neck, behind the ears, the temples, and the nucha; bleeding at the temporal or the jugular, if the agitation of the patient allow of its being practised, is also always useful. This mode of evacuation is preferable to general bleeding, which, however, may be had recourse to with advantage in some cases. When we have thus subdued the phenomena of reaction, by a more or less considerable abstraction of blood, we must have recourse to cold applied with precaution to the head, bearing in mind that it may be productive of two evils: when applied before blood-letting, it produces a reaction so violent that it can no longer be subdued; and when too late, the patient falls into a fatal collapse. Several methods are made use of for this purpose; pounded ice is put into a bladder, so that the patient may not be incommoded by its weight or

bulk; it should remain applied for a long time in order to produce a salutary effect. Some patients are painfully affected by the application, and we should persevere notwithstanding for some time, as the impression may not continue; if it should, as will be evinced by the cries, agitation, and suffocation of the patient, it must be abandoned as too painful; and in such a case, far from being beneficial, would only aggravate the mischief. Affusions of cold water at short intervals may also be employed, or a continuous current at the ordinary temperature may be established. In all these modes of employing cold water, care must be taken that it does not wet the chest and produce a fatal chill.

The use of revulsives requires the same precaution, and they must be employed only at certain stages of the cerebral inflammation. Their success can only be reckoned on when the general excitement is calmed; it often happens that some patients cannot bear them on the skin, and in such cases their application is followed by a general exacerbation of the symptoms. Andral thinks we ought to be very sparing of revulsives in encephalitis, and that they have no real power until coma supervenes and the general sensibility begins to be blunted. The same objections do not apply to the intestinal canal; here derivatives are always attended with good effects, except in the case where the digestive organs are affected by some morbid alteration. This opinion as to the preference to be accorded to strong purgatives is even more strongly insisted upon by Abercrombie, and he advocates especially the use of croton oil.

It has been stated that in inflammation of the brain, mercurials possessed an all but specific action; without sharing in this opinion, they may be usefully employed, either internally or by friction. We think, however, that their action as purgatives is the one most to be relied on.

Tetanus—The treatment of tetanus has varied with the ideas entertained as to the nature of the disease. We regard it as one of the symptoms of the most acute period of inflammation of the brain, when this inflammation penetrates into the motory fasciculi of the brain. We are then no longer surprised at the profuse blood-lettings resorted to by those physicians who consider tetanus to be an inflammation: several cases so treated have been cured. M. Lepelletier, by abstracting twelve lbs. of blood at six bleedings, cured a patient labouring under tetanus. M. Martin relates several cases cured in the same way; he placed the patient in a warm bath, where he was kept two hours, and three ounces of blood were taken each hour. In Lisfranc's case, in the space of nineteen days, he bled eight times, abstracting at each about four palettes; and during the same period he applied 722 leeches all along the spine, with the exception of fifty that were applied to the epigastrium.

Andral, who records these cases, freely admits that we must resort to the most rigorous antiphlogistic treatment, and that after bleeding, generally, we are to limit the application of leeches to the spine, but that we are to extend it to the nucha, the jaws, and, in the case of an amputation or wound, to it also.

The value of narcotics has been much insisted on; if success has been obtained through the use of them, the tetanus must have been very slight; they may, however, be used as adjuvants to bleeding. Opium in cases of inflammation is oftener an excitant than a calmant; in the normal state it causes congestion of the hemispheres; and one must be bold enough to employ it in high doses, in order to render the congestion comatose. It is, however, more prudent to employ with energy and celerity the rational means which the disease indicates, viz., bleedings and revulsives.

An Italian physician is said to have cured two cases by employing morphine by the endermic method. Purging is always of use, although its effect is only secondary; to excite the skin, warm or vapour baths, followed by dry friction, have been much employed, as well as many other means which we must consider as empirical. In this category we range mercury pushed to salivation; phosphorus, which is a dangerous stimulant of the brain and spinal marrow; the subcarbonate of iron, arsenic, and the oil of turpentine.

Chorea.—The methods of treating chorea are also very numerous, and, although differing from each other, are all in favour on the score of cures. We have, therefore, to pass in review those most in repute, bearing in mind that this disease consists especially in a partial inflammatory irritation of some fibres or fasciculi of the nerves belonging to the contractile motility.

The practitioners who, on the authority of Sydenham, believed that this disease was produced by the humours, whose evil influence irritated the nerves, administered purgatives largely, conjointly with blood-letting; this empirical method was often successful from its derivative power, but their manner of explaining it was absurd. Cullen thought that bleeding ought to be reserved for plethoric patients, and forbade the use of purgatives when the general state was asthenic. In this state he recommended bark and iron; his successes must have been few from such treatment. Bouteille's treatment was more appropriate: two or three bleedings, of from three to six ounces each. M. Serres recommends, in recent chorea, the application of leeches to the upper part of the cervical region and round the occiput. M. Guersent, on the contrary, formally forbids blood-letting, which he thinks is seldom indicated in this disease, and he has always found it injurious; but he speaks of such cases in young children only, which may differ greatly, not only in indications but results, in adult persons. Dr. Peltz, who considers chorea to be an inflammation of the arachnoid, proposes in the acute form reiterated applications of leeches to the temples, purgatives, and the mustard pediluvium; and in the chronic form, tincture of iodine, of which he speaks favourably. Others, after leeching, make use of blisters, and cautery along the spine.

M. Chrétien relates five or six cases successfully treated by repeated frictions with Rosen's liniment, composed of two ounces of gin, half a drachm of oil of cloves, and of balsam of muscade: an innocent method which smack strongly of the middle ages. I can more readily understand the favourable action of the ointment of tartarized antimony employed in frictions on the scalp, or along the spine, when it produces a revulsive eruption. Breschet's plan is also based on derivation; he administers tartrate of antimony in the dose of four, six, or eight grains, but in combination with opium, and in some strong aromatic infusion, to prevent vomiting: he gives, at the same time, pills composed of aloes, scammony, and jalap. The pills being of three grains, he begins with one, increasing the number successively, and giving them every three hours. Dr. Elliotson states that he has been successful in a large number of recent cases of chorea, in young and robust subjects, with the subcarbonate of iron. M. Baudelocque makes a similar statement: he also employed sulphurous baths, and cured almost all his patients by keeping them in the bath for an hour each day. Dupuytren had a high opinion of cold bathing, and thought it efficacious in all cases of chorea; he used to order them in the form of douche, *par surprise*, in affusion, or in the river or sea, aiding their effect by swimming and all bodily and gymnastic exercises. We think this plan liable to very serious objections, and that it should only be recommended in extreme cases, and after all other means have failed.

Convulsions.—The treatment of convulsions is sufficiently indicated by the very nature of the disease, and on this point the curative method recommended by all practitioners is almost the same. The first thing is to combat the cerebral plethora by repeated applications of leeches to the neck, temples, and mastoid processes. In the case of cerebral or meningeal inflammation, we must, besides, have recourse to general blood-letting. If the convulsions arise from teething, some leeches may be applied to the gums, although this is not so easily done on children. In cases of general exhaustion, or anemia, sanguineous evacuations are altogether improper, in lieu of them we may employ energetic derivation on the skin of the limbs; we should not be afraid to envelop the two legs in mustard poultices, taking care to limit the duration of their application. In those cases of anemia where the patient complains of severe pain, good effects are obtained from the use of narcotics and stimulants, such as spirit of ammonia, preparations of ether, tincture of castoreum, &c.

After the brain has been unloaded, the oxide of zinc, combined with henbane, has been employed with success; some practitioners have recommended sulphate of quinine. Mild purgatives should be employed to aid the treatment, by keeping the bowels free; and for this purpose purgative enemata, alternating with those of assafœtida, produce good results. If any eruption had disappeared, an attempt should be made to renew it by the warm bath, or very hot fomentations.

ORIGINAL CONTRIBUTIONS.

PRACTICAL REMARKS ON THE EMPLOYMENT OF IODINE, AND ON THE COMPARATIVE VALUE OF THE LOCAL AND GENERAL TREATMENT BY IODURETTED PREPARATIONS.

By Dr. LUGOL.

Translated for the Medical Times by ALFRED MARKWICK, Esq., Surgeon to the Western German Dispensary, and formerly Externe to the Venereal Hospital, Paris &c.

In St. Prosper Ward there is a child aged eight years, named Felix Domergue, who came in on the 28th of Nov., 1845, presenting the signs of a tubercular diathesis, which he had manifestly inherited from his parents.

This little boy has on his left thigh a chronic abscess which commenced about two months ago, and now forms on the anterior, internal, and inferior part of the limb, a soft fluctuating tumour, half the size of the head of a fœtus at full term, and having on its front part a spot where the skin is red and thin. The abscess, however, does not extend beyond the condyles of the femur, neither does it communicate with the knee-joint, and, consequently, the patient can walk without any very great degree of difficulty.

There is a fistula on the right foot, corresponding to the fifth metatarsal bone, which is kept open by caries of this bone, and first began about three months since.

The general state of the patient is satisfactory, with the exception of a slight cough; his strength and *embonpoint* have not much diminished, and his appetite is good.

On December 1, an incision about an inch in length was made in the external and most dependent part of the tumour, when more than a quart of reddish pus, containing fibrinous clots, escaped. A weak solution of iodine was then injected into the cavity, and a simple but slightly compressive dressing afterwards applied, a pledget of charpie having been previously inserted between the lips of the wound.

The injection was repeated on the following days, at the end of which time the swelling of the surrounding parts, and the purulent discharge, began to decrease, and in about three weeks the wound resulting from the artificial opening of the abscess was cicatrized; this opening did not, however, prevent the ulceration of the skin in that situation, where, as I have mentioned, it was red and thin, and therefore the pus escaped also through this aperture, which has remained fistulous.

Eight days after the abscess was opened, the little patient got up and walked about without a crutch, by using the affected limb.

But little matter now escapes through the fistula of the thigh, which is kept open by disease (probably necrosis) of the lower half of the femur, to which the abscess is owing.

The patient can now walk with scarcely any limping, and his health is very good. No alteration, however, has taken place in the fistulous caries fifth metatarsal bone.

Victor Marting, shoemaker, aged 23, came in on the 19th of December, 1845. On the right side of his neck there is a tumour, rather larger than the fist, extending from the lobulus of the ear to within two fingers' breadth of the clavicle, and oc-

cupying from before backwards the space of four fingers. It commenced in the month of May, being at that time about the size of a hazel-nut, and in three weeks had increased to that of a walnut. It then remained stationary until the month of November, when it began gradually to enlarge to its present size. At this period the patient felt a little pain in it of a lancinating kind, but it was never very acute.

On the 22nd of December the tumour, in which there was fluctuation, was punctured, and half a pint of very fetid pus made its escape. Three consecutive iodine injections. Repetition of the injections once daily up to the present time.

The tumour was reduced to less than half its original size by the puncture; it has since diminished, and is, moreover, much less hard; but it still has the tubercular character, and there is an abundant discharge of purulent matter at each dressing. The patient has not yet recovered his appetite or his strength; neither has he, he says, regained all his energy, although his general state of health is at present tolerably good.

Charlut, gendarme of the Seine, aged 41, had a tubercular tumour, larger than the fist, on the right lateral region of the neck. It commenced by a tubercle of the size of a hazel-nut, which remained nearly stationary for fifteen years. In the corresponding groove there was a tubercle of about the same size, which appeared at the same time as that on the neck, but did not get any larger.

For the last twelvemonth, but more particularly since last autumn, and still more so during the last fifteen days, the tumour has increased to such an extent as to prevent the patient from wearing his regimental stock, and from buttoning his coat, although it has been almost free from pain. Charlut on this account obtained leave of absence in order to get into St. Louis Hospital, where he was admitted on the 5th of February, 1846. On entering he was ordered an alkaline bath, and a purgative to be repeated on the third day. After this preparatory treatment the tumour was punctured on the 11th of February. More than a pint of tubercular pus, having a nauseous odour, was discharged, which towards the end was mixed with a good deal of blood.

Immediately after the puncture a solution of iodine was injected into the cyst, and repeated three successive times, the injection each time bringing away with it pus mixed with blood. When the operation was completed the patient was placed in an alkaline * bath, and while there, about a glass full of pus mixed with a large quantity of blood escaped through the incision. The iodine injections were continued on the following days. On the fourth day the patient had slight shiverings, frequent horripilations, headache, thirst, and no appetite. He was therefore purged a third time, not with seidlitz water, as on the two former occasions, but with calomel and jalap: whereupon the fever disappeared, and the appetite returned.

On the 22nd of February, the eleventh day after the operation, the tumour was reduced two-thirds in size, but there was still a discharge of pus at each dressing. The patient, however, at his own request, left the hospital, believing himself to be in a fit state to go on duty, but was recommended to continue the iodine injections. Although he has followed this advice, the tumour is now (fifty-two days after the operation) in the same state as on the eleventh; and, as he has not been able to wear his uniform to go on horseback, he has only taken to a sedentary duty in the barracks.

The patient says he no longer experiences the uneasiness to which he was subject previous to the operation, but I may mention that he has had a cough ever since he left the hospital; that a sister, aged 26, and a brother, aged 21, have died of pulmonary phthisis; that he lost eight other brothers and sisters when very young; and that he has now but one sister, the mother of two tubercular children, left. These antecedents and coincidences sufficiently explain the continuance of the tubercular discharge from the neck, and ought to direct our attention to the cough which has commenced since this subcutaneous tubercular suppuration was excited.

I have not alluded to the internal treatment that was commenced in the hospital, because it was of too short a duration, not having been continued after the patient quitted St. Louis. The plan of injecting a solution of iodine into a tubercular abscess, after it has been punctured, I have had recourse to in my hospital and private practice during the last fifteen years, in cases similar to those just referred to. Whenever I ascertain the presence of tubercular matter in the soft parts, I effect its discharge by means of a puncture; and after the evacuation of the cyst, I inject into its cavity a solution of iodine; this injection serves both to more completely empty the cyst of the pus which it may still contain in some of its sinuosities, and also to bring the iodine in contact with its internal surface, in order to modify it in a particular manner, and produce in it the adhesive inflammation.

During the two first years of my researches on the therapeutic effects of iodine in scrofulous patients (1827 and 1828), I made use of an iodine solution for the local baths of which we have just spoken,* and at this same period administered iodine water † internally, for I had not then discovered the formula for the iodurretted water.

After having given a formula for an iodine water to be administered internally, and an iodine solution for external use, I continued my investigations in order to find another for iodine baths; and I attached the more importance to the obtaining this new mode of administration, as it appeared to me, *à priori*, capable of very advantageously assisting to multiply the good effects of the treatment I had successfully pursued since that time. The results I obtained were beyond my most sanguine expectations; for, although I did not succeed in finding a satisfactory formula for iodine baths, I had the good luck to discover something still better, namely, one for iodurretted baths, by means of which I have since perfected the greater number of those I had previously employed. Consequently my memoir on the iodurretted baths may be considered as the foundation upon which I have hereby based my method of treating scrofulous diseases.

In the first place, in order to arrive at the formula for iodine baths, I performed three experiments; but at the third it was evident they could not be formed, and that, therefore, to be able to find out what I wanted, I must adopt some other proceeding.

For the better understanding what I am about to say, I will allude in a summary manner to this third experiment.‡

Three drachms of very pure iodine were dissolved in six ounces of rectified alcohol, and the spirituous tincture thus formed afterwards added to a hot bath at 50 deg. Reaumur. As this alcoholic solution was being poured into the bath, violet-coloured vapours were seen to rise from the surface of the water, and in a few moments the atmosphere was so loaded with them that those who stood by became inconvenienced by the irritation they produced in the eyes, the nasal fossæ, the pharynx, &c. Before this experiment was ended, the odour of the iodine had passed through the walls of the bath-room, and had reached as far as the courts of the hospital, even before the baths could be emptied. Moreover, the iodine was seen to deposit itself in the solid form on the sides of the bath; consequently the alcohol, weakened by the water, had abandoned the iodine, which, being thus isolated, became disengaged partly in the form of violet-coloured vapours, and partly as molecules suspended in the water.

The same phenomena occurred seven times in the same space of time, inasmuch as I operated on seven scrofulous patients, in order to act on the principal forms of the disease. The sight of them made me reflect on the internal administration of the alcoholated tincture of iodine, and they fully confirmed the remarks I had already made on this preparation of Dr. Corridel's, the use of which I have always objected to for the reasons I have given at page 46 of my first memoir. It is evident, from what then took place before us, that the internal use of this tincture must be followed by a deposit of the iodine in the solid state on the coats of the stomach—a circumstance that cannot fail to be injurious to the patient, in consequence of the very strong affinity of this body, when in an isolated form, for animal substances, which it decomposes with great activity.

Having failed in my attempts to find the iodine bath—the iodated bath, properly so called—I endeavoured to discover by some other means the solution of the problem to be resolved. For this purpose I commenced a second series of experiments.* This led me to the composition of the iodurretted baths—that is to say, to the preparatory solution of the iodine, not in alcohol, but in iodide of potassium, which is an excellent solvent for it, and which contains a very large proportion of it in the state of a neutral salt. This solution is obtained by combining one part of iodine with two of iodide of potassium. These proportions of the two bodies produce a mixture which is equal in all its parts, and which is perfectly soluble in distilled water.

Such is a summary description of my labours to arrive at the formula for iodurretted baths, and which have caused me to entirely abandon the use of iodated solutions, and to prescribe nothing but iodurretted ones, both for internal and external use.

For the last fifteen years,—that is to say, since I discovered the formula for the iodurretted baths—I have not employed any iodated preparation. My practice relative to the administration of the iodurretted preparations has acquired every possible notoriety, since it is described in my works, and has been propagated in Germany, England, and the United States, by the numerous translations of them that have been published, and by the favourable reception they have met with from the medical press of all countries. I have also endeavoured to make my method still more known by the special clinical instruction I have created at the Hospital St. Louis: I say created, because I have never entertained those who attended with anything but my own researches.

From these antecedents, and others which I will not mention, I shall, I think, be authorised in expressing my opinion on the more recent employment, by certain practitioners, of an iodated solution in cases of hydrocele, and also for the cure of chronic abcesses. Far from being an improvement, I consider that to return to these preparations which I have long since abandoned, and to speak of iodine injections and collyriums, &c., as was the case at the time of my first labours, is to make a retrograde step in the art of prescribing. We thus go back to the period when my first memoir on the employment of iodine in scrofulous diseases was published, and when I had as yet given no other formula than for iodine solutions for internal and external administration. With respect to this latter mode of administering iodine, there has been some degree of surprise, which those who eagerly seek for truth will soon overcome.

* We are no longer able to give iodine baths to the patients at the St. Louis Hospital, in consequence of the very high price of the iodine, occasioned by the enormous abuse that has been made of it, during the last few years, contrary to the rules I have laid down respecting its employment.

* Memoir on the Employment of Iodine in Scrofulous Diseases, read at the Academy of Sciences on the 28th of June, 1829; preceded by the Report made to the Academy by MM. Magendie, Serres, and Duméril, reporters.—Paris, 1829; page 54.

† Ibid., pp. 48 *et seq.*

‡ Memoir on the Employment of Iodurretted Baths in Scrofulous diseases, followed by a table for their administration according to age.—Paris, 1830; pp. 27 *et seq.*

* Memoir on the Iodurretted Baths, pp. 34 *et seq.*

Several cases of poisoning among children have occurred during the last fortnight in the eastern parts of London, by the fruit of the atropa belladonna being sold for wortle-berries. Inquests have been held in the London Hospital on several occasions, and the person who sold the berries, having, in the opinion of the jury, shown culpable negligence, has been fully committed to take his trial for manslaughter.

ON THE PROPRIETY OF EARLY OPERATIONS IN CASES OF STRANGULATED HERNIA.

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The following remarks, although drawn up for a different purpose, may not be altogether uninteresting. They consist of three heads:—1st, The opinions of many authors who have written upon the subject, from the earliest times to the present. 2nd, My own opinion derived from observation of cases operated upon. And 3rd, A tabular form of thirty-six cases, collected indiscriminately from the works of different authors and various periodicals. A comparison of the whole will show how far experience agrees with what is recorded in books.

It is pretty evident the ancients knew little of the pathology of the disease, nor did the moderns much improve upon their practice until the last few years.

Celsus, Galen, Œtius, Albucasis, Avicenna, and a host of others of an early date, evidently performed an operation *not* for strangulated hernia, but as a radical cure for "rupture"; nay, more—they held it to be bad practice to perform the operation whenever pain, vomiting, &c., were present. "Rursus, si ætas processit, multumque intestin descendisse ex tumore magno patet, adjiciunturqu dolor et vomitus; quæ ex stercore, ex cruditate e delapso, fere accidunt; scalpellum adhiberi sin perniclo non posse, manifestum est; lerandum tar tummodo malum, et per alias curationes extra hendum est."*

Until the last century, surgeons were divided i opinion as to the propriety of operating when evi dent symptoms of sphacelus or mortification were present. "These ruptures are often attended wit danger, especially the incarcerated, in which, i the intestine be not timely returned, but the stric ture continues two or three days, red and livid spot appear upon the tumour, which denote a sphacelu or mortification, and, if a universal cold swea seizes the patient, he has generally but a few hour to live. In this case many prudent surgeon omi the operation as useless, to avoid reflections, a being instrumental to the patient's decease."†

The same author also advises the following remedies,—Bleeding, cataplasms, ointments, laxatives, and tobacco clysters, which having failed he adds, "When the surgeon perceives that it i impossible to return the intestine, and finds by the great inflammation, pain, and vomiting, that th disorder will be fatal, he should acquaint th patient and his friends with the *great necessity* there is for him to undergo the operation, to preven a mortification and subsequent death."

It is evident from the above that Heister and hi contemporaries were in favour of operating as soon as other means had failed, and these were not to occupy *more* than forty-eight hours.

An author about twenty years later, after mentioning two or three cases of artificial anus produced naturally, and by such means the disease being cured, writes,—"These cases, however, are only mentioned to furnish surgeons with the knowledge of the possibility of such events, and not to mislead them so far as to make favourable inferences with regard to gangrenes of the bowels, which generally are mortal."‡

His preliminary treatment consisted in bleeding, injections, fomentations, and then the taxis, after which, the hernia being still unreduced, he recommends, after Peter Lowe, puncturing the intestine in five or six places, with a needle. Should this prove ineffectual, he adds, "After all, should the pain and tenseness of the part continue, and hiccough and vomitings of the excrements succeed, the operation must take place; for *if you wait* till a languid pulse, cold sweat, subsiding of the tumour, and emphysematous feel come on, it will be most likely too late, as they are pretty sure symptoms of a mortification."§

* Celsus, lib. vii., sec. xx.
† Heister, vol. ii., p. 47; 1743.
‡ Sharp's Observs., edit. vii.
§ Sharp Loc. Cit., p. xx.

We come now to a period when surgery far superseded that of the preceding generation,—to a time when practice was founded on more correct anatomical and physiological principles, which can be the only safeguard to an operating surgeon.

Benjamin Bell, in treating of strangulated hernia, recommends the taxis, bloodletting, an injection of tobacco smoke, cold to the part, opiates, and the warm bath. He objects to purgatives; "but," he says, "it frequently happens, notwithstanding every endeavour, that the protruded parts cannot be returned. * * * In this situation, when no probability remains of success from the employment of the means already mentioned, the division of the parts producing the stricture is then our only resource. This operation," he continues, "is, no doubt, attended with some hazard; yet, so far as from experience I am able to judge, the risk attending the disorder itself, when the operation *is long delayed*, is infinitely greater than is commonly experienced from the effects of the operation considered abstractedly." He concludes by saying—"It ought, therefore, to be laid down as an established maxim, always to proceed to the operation, if in the space of a *very few hours* bloodletting and the other remedies pointed out do not prove effectual. Two or three hours at farthest, even when the assistance of practitioners is early applied for, is perhaps the greatest length of time that should ever be consumed in trials of this nature."*

The preliminary treatment laid down by Mr. Bell continues nearly unaltered to the present time; I shall, therefore, mention only the opinion of his successors as to the propriety of early operations.

The late Mr. Hey, of Leeds, to whom our profession owes much, writes, "When I first entered upon the profession of surgery, in the year 1759, the operation for the strangulated hernia had not been performed by any of the surgeons in Leeds. My seniors in the profession were very kind in affording me their assistance, or calling me into consultation when such cases occurred; but we considered the operation as the last resource, and as improper until the danger appeared imminent. By this dilatory mode of practice I lost three patients in five upon whom the operation was performed. Having more experience, I made it my custom, when called to a patient who had laboured two or three days under the disease, to wait only about two hours. * * * In this mode of practice I lost about two patients in nine upon whom I operated. I have now, at the time of writing this (1809), performed the operation forty times, and have often had occasion to lament that I had performed it too late, but never that I had performed it too soon."†

The late Sir Astley Cooper, perhaps the most celebrated author who has written upon the subject, computes that the time occupied in treatment previous to the operation ought not to extend over four hours.‡

Mr. Lawrence, also an excellent authority, writes, "When, as it very frequently happens, the aid of the surgeon is not required until the complaint has lasted for some time, a trial of the tobacco, together with the topical use of cold, should be immediately resorted to, as circumstances *will not admit of delay* in the previous use of less powerful remedies."§

Mr. Guthrie remarks,—"That a hernia of recent formation cannot remain in a state of incarceration ending in strangulation, *for a longer period than ten hours*, without placing the patient's life in great jeopardy."‖

Mr. Samuel Cooper says—"In the treatment of strangulated hernia, a surgeon cannot be too deeply impressed with the danger of spending time in the trial of methods of inferior efficacy, or of such as are evinced to be ineffectual in the cases before them."¶

Sir Benjamin Brodie, although his opinion is not expressed, that I am aware of, in any of the standard works, writes, in answer to a letter requesting it:—"When I was a student at St. George's Hospital, the custom was (in a case of strangulated hernia) to defer the operation until a great number of other means had been employed, and had failed to accomplish the reduction. Under this treatment very few patients (usually not more than one in three or four) recovered.

"It is now a great many years since I adopted the plan of operating at an early period after the commencement of the strangulation; and, under this mode of treatment, I may venture to say that the failures have been even less frequent than the recoveries were formerly. You will observe, however, that the operation in hospital practice is never so successful as it is in private practice, and for this reason, that a patient in private practice generally seeks assistance *immediately* on the hernia being discovered."

* *Vide* B. Bell's Surgery, vol i.; 1787.
† Hey's Observations; 1814.
‡ Cooper's Lectures, 8th edition.
§ Loc. Cit., 3rd edition. ‖ Guthrie on Hernia.
¶ Cooper's Dictionary.

From Professor Roux the report of a number of cases was received in addition to his opinion thereon, all proving the positive necessity of early resorting to the operation. In short, with the exception (I believe) of the late Dr. Heberden, that opinion has been invariably expressed in the strongest terms by all modern authors. I am satisfied, that although the taxis and other means may be employed almost with impunity, and occasionally with success, in cases strangulated only a few hours, the application of the taxis, in cases of three or four days' duration, tends very materially to destroy the success which might be looked for from the operation even at that late period. I feel equally satisfied that the shorter the period between the commencement of the attack and the operation, the greater is the chance of success. I will go further and say, whoever neglects to act on this principle must hold himself accountable for the fatal termination which usually follows delay; and, should some days have elapsed, I am confident the greatest (*in fact the only*) chance of success is in the *immediate* performance of the operation, and in not losing such precious moments in *useless proceedings*.

TABLE I.

Strangulation limited to twenty-four hours.

Age.	Result.	Operator.
61	Cured.	Hey.
35	Do.	Do.
46	Do.	Do.
—	Do.	Duncan.
28	Do.	Morton.
—	Do.	Lee.
60	Do.	Arnott.
22	Do.	Phillips.
47	Do.	Cooper.

TABLE II.

Strangulation limited to forty-eight hours.

Age.	Result.	Operator.
—	Cured.	Hey
37	Died.	Do.
107	Cured.	Hawkins.
75	Do.	Wade.
20	Do.	Solly.
51	Do.	Morton.
42	Do.	Do.
64	Cured.	Thompson.
27	Died.	Morton.
55	Cured.*	Arnott.

TABLE III.

Strangulation limited to seventy-two hours.

Age.	Result.	Operator.
34	Cured.	Hey.
25	Do.	Dr. Cotton.
32	Died.	Partridge.
53	Cured.	Morton.

* In addition to the hernia, this patient was advanced in pregnancy, which ended in abortion five days after the operation.

TABLE IV.

Strangulation from four days and upwards.

Age.	Result.	Operator.
45	Cured.	Hey.
38	Do.	Do.
40	Do.	Do.
35	Do.	Hawkins.
71	Died.	Do.
50	Do.	Walker.
36	Cured.	Young.
[illegible]	Died.	Burton.
50	Cured.	Sutton.
—	Died.	Do.
21	Cured.	Morton.
36	Do.	White.
—*	Died.	Cotton.

* his [illegible] mained in the hospital forty-eight hours before the operation was performed, which she survived about two more.

The deaths are from the above tables in proportion to recoveries in the following proportions:—

In Table I they are 0 to 9.
In Table II. they are 1 to 5.
In Table III. they are 1 to 4.
In Table IV. they are 1 to 2 3-5ths.

OBSERVATIONS ON CHOLERA.

By DAVID M'CONNELL REED, Lic. Med., &c.

In the "Archiv. fur Physiol. und Pathol. Chemie und Mickroscopie," vol. ii., there appears an article on the "Analysis of the Urine, Blood, Fæces, and vomited matters, in Cholera Sporadica," by Dr. Heller.

From the experiments of Dr. Heller, it appears that the urine in sporadic cholera had a strong acid reaction, and was of specific gravity 1,018. The addition of nitric acid detected a large quantity of a peculiar animal matter, to which the deep colour of the urine (which is reported to be small in quantity, of a deep golden yellow colour, and possessed of a faint but very peculiar odour) was obviously due. When voided it was tolerably clear, but shortly deposited a small quantity of flocculent mucus, and a fine sediment of earthy phosphates. When first the acid was dropped in, an intense violet-red colour was produced; this, on shaking, was changed into a dark carmine red, and then to a dark violet, which remained. When a large quantity of acid was added, the colour assumed was a dark brown, which was permanent. These peculiar changes in colour produced by nitric acid were probably due to the presence of altered bile-pigment in the urine. Had the pigment been ordinary biliphœin, it is stated that a green instead of a red colour would at once have been struck on the addition of the acid. Another effect produced by the addition of nitric acid was the evolution of a large quantity of gaseous carbonic acid. No albumen was detected. The addition of ammonia caused an almost entire disappearance of the earthy phosphates, and changed the golden yellow colour of the fluid to a brownish red. The addition of a salt of silver to the acidulated urine showed that *almost all the chlorides had disappeared*. When the same salt was added to the non-acidulated urine, a precipitate was formed, which was soluble in nitric acid with an abundant evolution of carbonic acid gas. A salt of baryta detected very little of the sulphates, but also gave rise to an abundant evolution of carbonic acid. On boiling, all the carbonic acid disappeared; *which proved that the acid existed free in the urine*; and that it was in all probability *the chief cause of its high acidity*. One thousand parts of the urine contained 955·67 parts of water, and 44·33 parts of solid constituents, of the latter 10·50 consisted of urea (12·8 being the average quantity in health), about 0·10 of uric acid; 27·32 of extractive matters; together with a large quantity of the peculiar animal substance above described, and which, most probably, originated from bile; 6·41 of fixed salts, which consisted in great part of phosphate of soda and sulphate of potash. With regard to the uric acid, it should be remarked that the crystals of it thrown down by the addition of hydrochloric acid had a square form, and were of a beautiful deep blue colour. When viewed by reflected light, these crystals presented a brilliant violet-red colour, with a metallic lustre like that of titanium; by transmitted light, they appeared of a beautiful blue colour throughout, and formed a fine layer over the violet-coloured urine. The peculiarity of the uric acid crystals obviously resulted from their being combined with the pigment above described: for in addition to the previously-mentioned reasons for regarding this pigment as somewhat different from ordinary biliphœin, and as probably a modification of it, it may be stated that the crystals of uric acid, deposited through the action of hydrochloric (muriatic) acid, from urine containing even a very large quantity of biliphœin, as in the case of intense jaundice, are never blue, but always yellow. *The almost complete absence of chlorides (muriates) from the urine is also very remarkable, since these, especially chloride of sodium, appear to fulfil an important part in the system. Lastly, the large quantity of free carbonic acid contained in the urine is a highly curious circumstance*, but it is often found largely in the urine, in combination with ammonia, but it is then a product of the *decomposition of urea*, and is coincident with an alkaline condition of the urine. But in this case there was *no carbonate of ammonia present*, and the urine possessed a *highly acid reaction*. The foregoing observations on the urine in sporadic cholera are attributed to Dr. Heller.

Now, let me observe that an atom of urea, an abundant ingredient of healthy urine, is composed, according to Drs. Prout and Berard, of two atoms of hydrogen, one of carbon, one of oxygen, and one of nitrogen, and may, therefore, be considered to be a kind of carbonate of ammonia with excess of hydrogen. It is reported to manifest neither an acid nor alkaline reaction, nor is it found to undergo any change from the atmosphere, except a slight deliquescence in very damp weather. But it forms, with nitric acid, the acidulous nitrate of urea, evidently manifesting, in this relation, alkaline properties. It would therefore seem that it is indebted for its neutral properties to the excess of hydrogen which it contains; and that the operation of nitric acid in combining with it, is first to convert the excess of hydrogen which it contains into water by affording oxygen to it, and then forming with the alkaline substance which results an acidulous salt. Perhaps the only difference between urea and uric acid is, that one contains excess of hydrogen, the other excess of carbon, in relation to the other ingredients; and that the one has neither acid nor alkaline reaction, whereas the other has a decided acid reaction. Be this as it may, they are usually found to prevail in the urine under different diatheses; an excess of urea generally accompanies what is called the phosphoric diathesis, or that in which the earthy phosphates abound in the urine; whereas, the lithic diathesis seems to be that state in which pure lithic acid abounds in it.

In sporadic cholera, however, according to Dr. Heller, the urine appears to be deficient in urea; whence I argue that there is a deficiency of oxygen, hydrogen, and nitrogen, in relation to carbon, in the blood; and that the deficiency of these elements is owing to deficient consumption or decomposition of pure air, water, and chloride of sodium by the system. Dr. Heller considers the absence from the urine of the chlorides (I suppose he means the muriates) to be very remarkable, since the former (in which I agree with him), especially the chloride of sodium, appear to fulfil an important part in the system. (See my work on Fever Physiologically Considered, &c., lately published.)

Dr. Heller noticed that the urine in the above case possessed a strong acid reaction, which he considered to be owing to the presence of free carbonic acid in it.

Although this may at first sight appear to be at variance with my opinion, that cholera essentially depends on a deficiency of oxygen in the blood, yet I think that on close examination it will be found to be confirmatory of it. For, let it be remembered that unoxygenized blood—the liquor sanguinis—consists of a great variety of inflammable substances, with metals and earths in a minute state of division, in the form of globules suspended in a solution of animal matter, and chloride of sodium in water. This is the state of the fluids before they undergo that change whereby they become blood. Now, these inflammable, metallic, and earthy substances require to be oxygenized in order to be able to sustain life—the action of the system; but, to be efficacious to this end, this process must take place in such a manner as to leave the blood, after it has made its circuit—that is, the venous blood—in a perfectly neutral or saline state. In order to this, however, the liquor sanguinis must meet with such a supply of oxygen, whether in the lungs or in the course of circulation, as will effectually convert all its inflammable constituents into acids, and its metallic and earthy bases into oxides, in such a proportion as to neutralize each other, and to form perfectly neutral secretions and excretions. These are the conditions of health, nay, even of life; and in the constant recurrence of these changes in its constituent corpuscles consists the vital action or *life of the blood*.

It will hence appear that either an acid or an alkaline state of the blood (both inconsistent with its healthy function) may arise from a partial supply of oxygen—in other words, a deficiency of oxygen—in the system; whence only some of the inflammable substances are converted into acids, or some of the metals and earths are converted into oxides or alkalis, and the remainder of them are left unchanged.

In the foregoing case we have reason to suspect a deficiency of ammonia in the blood during life; for, as was already hinted, urea may be considered to be a compound of carbonic acid and ammonia with excess of hydrogen; but here we have a deficiency of urea, and a redundancy of carbonic acid; whence we conclude that, if there had been more ammonia and hydrogen in the blood, there would have been less carbonic acid and more urea in the urine.

Now, it has been shown that there was almost a total absence of chlorides (muriates) from the urine in the above case; whence we conclude that they (the muriates) could not have been present in the blood: for the nature of the urine is a sure index of the nature of the blood. The operation, however, of the chlorides in the system, is to decompose water, so as to supply oxygen to the inflammable substances, and metals and earths in the liquor sanguinis; to conduce to the formation of ammonia, and the decomposition of atmospheric air. (See my work already alluded to.)

In the foregoing case there was also noticed great deficiency of the sulphates in the urine, which also argues a deficiency of oxygen in the blood.

On the whole, then, we conclude that carbonic acid was formed to the detriment of the neutrality of the blood; and that it was the result of a deficiency, in the system, of the acidifying, oxidifying, and alkalifying principles—in other words, a deficient consumption or decomposition of the substances which yield them, viz., pure air, water, and common salt.

The blood which served for analysis was obtained from the carotid artery *after death*; and, therefore, no certain conclusions can be arrived at respecting its state *before death*. It was, however, reported to be generally fluid, though coagula were found here and there in the bloodvessels, and especially in the cavities of the heart; it was very dark, yet strongly coloured, and of a tolerably thick consistence. The quantity of fibrine was very small. Beneath the microscope, the blood corpuscles appeared indented, and many fat globules were observed. The serum, after the subsidence of the red corpuscles, was of a dark yellow colour, and an alkaline reaction. It contained a full quantity of albumen, but not a trace of biliphœin could be detected. The quantity of fat was large; that obtained by ether and alcohol was perfectly saponafiable, and contained no cholesterine. When examined for urea by Simon's process, it was found to contain a very large quantity of this substance. This was manifestly the result of the great suppression of urine. The proportion of fixed salts in

the blood was much increased, especially the chlorides of sodium and of potassium, the muriates which were absent in so marked a degree from the urine. A similar circumstance was noticed by Phœbus.

From the whole account of the blood taken together (although, as before said, it was extracted from the patient after death, and therefore not likely to present a correct specimen of the blood during life), I conclude that it was deficient in oxygen.

This is proved by the deficiency of fibrine, the dark colour, the fluid state, the quantity of fat present, the presence of much urea and chloride of sodium and potassium, and the absence of muriate of ammonia and muriate of soda and potassa.

The fæcal evacuations, which were very abundant and frequent, were watery and of a turbid, whitish, gruel-like appearance; the fæcal odour was but seldom perceived. They had an alkaline reaction and contained albumen. By nitric acid their colour was changed to a deep brownish red, which passed into violet, exactly resembling, therefore, the changes produced in the urine by the same re-agent. ammonia also produced here the same dark-brown red colour as it did in the urine. The same peculiar substance, therefore, which was found in the urine and regarded as altered bile-pigment, was present also in the fæcal evacuations. Simon also, as well as others, mentions the peculiarity of the bile in the fæces of cholera becoming frequently red instead of green, by nitric acid. Crystals of ammonia and phosphate of magnesia were also found in the fæcal evacuations in this case.

It is difficult to know to what to attribute the want of colour in the fæces, and the changes produced upon them by nitric acid, unless we suppose a total deficiency of oxygen, chlorine, and hydrogen in some of the constituents of the bile—perhaps the picromel. We know, however, that to the presence of picromel is owing the peculiar greenish-yellow colour of the bile. We also know that substances capable of supplying oxygen, hydrogen, and chlorine, to the blood, are efficacious in restoring the bilous colour to the stools, when lost. Upon the whole, then, I lean to this opinion in the absence of a better explanation of the difficulty.

The matters vomited during the progress of the disease are very watery, and of a greenish or yellowish green colour, and a slight acid or neutral reaction.

Bile was the most essential ingredient, and it reacted towards nitric acid as ordinary biliphœin would, the first change in colour produced by the acid being green. The peculiarity of the matter vomited probably consisted in its containing bile with an excess of carbonic acid; which accounts for its acid reaction, for pure bile would have been rather of an alkaline reaction, from the presence of free soda in it. But the deficiency of this substance in the bile, notwithstanding the presence of carbonic acid, when compared with the quantity of chlorides of sodium and potassium which the blood was reported to contain, may be considered as an evidence that there had been a deficiency of free oxygen and chlorine in the system.

The article terminates with the following observation :—"In conclusion, it would seem as if in this disease a peculiar change or decomposition was undergone by the bile, and it would be important to ascertain whether a similar alteration of this fluid takes place in other cases." The same observation may, with equal propriety, be applied to the urine and the perspirable matter; and, perhaps, it would be more correct to apply it to the blood, on the state of which depends the quality of all the secretions.

In confirmation of the opinions here advanced, respecting the nature of cholera, I shall extract some observations from an article on cholera, made by Mr. Ffrench, surgeon to St. James's Infirmary, which appeared in a late number of the "Medical Gazette." This gentleman finds fault with Dr. Copland's view of the nature of cholera, and considers it to consist essentially in paralysis of the lungs, and proposes to name it pestilential asphyxia. Mr. Ffrench's objection rests on the supposition that the action of the heart and brain cannot cease without a previous suspension of the action of the lungs. Now, this supposition is not correct; for in syncope the action of the heart and brain ceases before the action of the lungs; and in asphyxia (an objectionable term, because it signifies want of pulsation) the action of the lungs ceases before that of the heart and brain. But, although I cannot agree with Mr. Ffrench as to the grounds of his objection, yet I am not prepared to dissent from him wholly, in the view which he takes of the subject, since he considers cholera to consist essentially in paralysis of the heart. Mr. Ffrench, however, having led us so far, leaves us in the lurch; nor does he afford us the slightest clue in discovering the cause of the said paralysis of the heart. He compares cholera to "dropped hand," and tells us that the quickest mode of curing it is to place it upon a splint, and in a sling, and at the end of three weeks the power of the limb is found to be regained; from which I suppose he would infer, that the quickest way of curing cholera is to let it alone. Mr. Ffrench, however, very properly objects to the use of diffusible stimuli in the treatment of this disease.

Now, I think I have supplied the hiatus which appears in Mr. Ffrench's account of the nature and treatment of cholera, by attributing it to a loss of irritability in the contractile fibre, arising from a deficiency of oxygen in the system; and by showing that the proper treatment of the disease consists in the exhibition of such substances as are capable of communicating this principle to the blood. And this appears to be the true view of the subject, whether we consider the exciting, predisposing, or proximate causes, or the operation of those remedies which have been most efficacious in the cure of this disease.

A pamphlet has been lately published by Dr. Parkin, wherein the exhibition of carbonic acid is proposed as the *antidotal treatment* of cholera; but, as a large quantity of this substance appears to be generated in the system during the disease, it is probable that the effects attributed to carbonic acid by Dr. Parkin, are in reality due to the neutral compound which results from his prescription, the carbonic acid escaping before it reaches the stomach, or, at all events, being rejected by vomiting as soon as it reaches that viscus.

In conclusion, I shall quote an observation which occurs in Mr. Ffrench's paper :—"The treatment of cholera, indeed, however injudicious, will not prevent a considerable number of patients recovering from this disease; so much so that each practitioner, pursuing any mode of treatment whatever, will congratulate himself on his extraordinary success. So it was with the physicians of a former day in the treatment of smallpox by stimulants and close rooms." The treatment, however, which I have published, as likely to be most efficacious in cholera, has been put in practice in three instances, wherein members of my own family (one an infant of eight months old, another a bride, and the third an elderly lady) were severely attacked with this disease; and, I am happy to say, it was attended with the most marked success. In two other instances, however, wherein my advice was not followed, one of the patients (an infant) died; and the other had her complaint (which was at first trivial) so much aggravated in the lapse of three days, as to be reduced to the very verge of the grave.

Whatever, therefore, may be the fate of the opinions which I have published on this subject, I myself have the very best reasons to be persuaded of their correctness; and I should wish others who question them, or who have none of their own, to put them to the test of experience.

11, Queen's-road, Notting-hill,
August 27, 1846.

PERFORATION OF THE STOMACH.

By GEORGE HILL SMITH, Esq., Surgeon.

Mr C., a farmer, tall, thin, and healthy-looking, sent for me to see him on the 24th of April last; he was then suffering from an œdematous state of the legs, the result of erysipelas, which had attacked him a fortnight before. He complained also of symptoms of indigestion, and irregularity of the bowels. He stated that for some time he had felt uneasy after his meals; there was great flatulence, and frequently a pain in the epigastrium; his bowels were irregular, but his appetite very good, and he indulged it freely. These symptoms increased when the erysipelas appeared. At the time I saw him, however, he more particularly called my attention to the state of his legs.

Under the use of stomachics, alteratives, and local applications, his legs became somewhat better; but his dyspeptic symptoms continued, in consequence of which I remained in attendance upon him for several weeks.

On the 6th of June I was hastily summoned, and on arriving at his house, at two o'clock in the afternoon, I found him lying on the sofa, complaining of constant, excruciating pain in the epigastric region. His countenance was pale and expressive of great agony; his pulse was small, rapid, and thready. He had no vomiting. On inquiry, I learned that he had dined at one: had eaten a hearty dinner of pork and lettuce; that afterwards he suddenly felt a severe pain across the epigastrium, and was obliged to lie down and send for assistance. His bowels had been open before dinner.

Thinking that a fit of indigestion had probably come on, aggravated by the indigestible food he had taken, I ordered an emetic of ipecacuanha and antimony; it had not the least effect, however, and was repeated without avail.

The pain continuing very severe, calomel and opium were ordered, to be followed by a dose of castor oil; and after waiting some time the castor oil was repeated, but it had not the slightest effect. As his bowels continued so obstinate, and the symptoms increased in severity, two enemata were administered, without the least effect, and the calomel and opium were repeated every two hours. Hiccough appeared in a few hours, and during the night the symptoms increased. In the morning, as his bowels still remained so obstinate, I gave him two drops of croton oil, which, having no effect, were repeated without any benefit. During the day the symptoms increased in severity; the pain increased; the abdomen became tympanitic; the countenance was more anxious; the pulse became very rapid and thready; the extremities cold; and he died sensible at seven P.M., not having experienced the least alleviation of his sufferings.

Post-mortem Examination, eighteen hours afterwards.—On opening the abdomen, which was very much distended, a quantity of fluid appeared, amongst which I could distinguish the various medicines almost in an unchanged state; there was also some of the meal of the previous day. On carefully examining the stomach—which was collapsed at its lower border, about an inch from the pylorus—I found an ulcerated opening about the size of a shilling, through which I could easily pass my fore finger. The edges of the ulcer were regular and smooth; the mucous membrane around the opening was inflamed; the mucous membrane altogether was highly congested; the rest of the intestinal canal was healthy, as well as the other viscera.

Stevenage, Hertfordshire, Aug. 28.

How few medical men were candidates in the last election of the Chamber of Deputies! how few were elected! This is vexatious to our profession, which in this respect is deficient of the necessary renown and the essential support. The more numerous the medical electors, and, if possible, the deputies, the more our just and frequent protests will carry weight and have chances of success. There are, however, contrary prejudices; there are people who imagine that the Chamber of Deputies is not a proper place for physicians—that their part in it is too secondary. Such a prejudice seems to us to proceed from ignorance and folly. Public affairs are our affairs; to maintain the contrary is an absurdity. Why not take in the representation of our country a part more direct and positive? Not only a greater number of medical men are necessary in the Chamber of Deputies, but we doubt not that, if there, they would introduce into it those high views and conclusive reasonings which they necessarily gather from the profound study of their art.—*Gazette Medicale de Paris.*

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

THIRD SERIES.

Reported by WILLIAM ANDERSON, Esq., Student at St. George's Hospital.

MEDICAL CASES.

SUBJECT—HYSTERIA.

(Continued from p. 432.)

Of all the maladies to which the human frame is liable, there is probably none which is more distressing to the patients and their friends, and more annoying to medical men, than hysteria.

The disease is harmless as far as life is concerned, but the fits which accompany it, and the strange freaks and fancies which the patients have, are sources of the greatest alarm and anxiety to their friends, and of extreme perplexity to members of our profession, since the treatment is generally very unsatisfactory, and the cure often but imperfect.

The subjects of this complaint are almost always females, probably on account of their being more delicately constituted than men, their spirits being raised or depressed by much slighter causes,—in fact, to use a common expression, they are of a much more excitable temperament than the other sex. Now, with regard to the symptoms: the most striking of these is, probably, the hysterical fit; this for the most part commences with a wild expression of countenance, the eyes roll, the teeth are tightly clinched and ground together; the whole frame becomes convulsed, the patient struggles violently, tears her hair and clothes; the breathing is deep and difficult, and there is palpitation of the heart; the face is flushed and generally thrown back, with the throat projecting; this state soon passes off, and the patient lies quiet and exhausted for a short time, until the paroxysm suddenly returns and is again succeeded by a calm.

In this manner these paroxysms and periods of rest alternate with one another for a time, varying considerably in different cases, until the whole generally terminates in a violent fit of tears, sobs, and laughter. If this fit were the only symptom we had to deal with, the disease would be much more manageable than it is; unfortunately this is not the case: the symptoms are almost innumerable, aping almost every known disease, and often with such exactitude that men of the greatest skill have been misled by them; for instance, we may be summoned in a great hurry to a patient with all the symptoms of peritonitis, and it then of course becomes a matter of the utmost moment to decide whether it be really peritonitis or not, for in the one case the antiphlogistic treatment would only serve to aggravate the mischief, while in the other the want of timely depletion would probably cost the patient's life. In both cases our diagnosis should be quickly formed, in order that in the one case we may allay the fears of the patient and her friends, and in the other that our treatment may be prompt and decided. We have a good example of this in the case of Charlotte Atkins (case 1st); for on the 22d of May we find her with a rapid, weak pulse; red, glazed tongue, her legs drawn up, and complaining of violent pain in the abdomen, which is tympanitic, and which she cannot bear to be touched, even by the bedclothes. But here is one grand diagnostic mark between the two diseases, the hysterical and the true, viz., the effects of *touching*; she cannot bear to have her abdomen touched, but if her attention be drawn away she can bear not only pressure, but will even allow her bowels to be squeezed in the hand, without showing any sign of pain. Now, in a true case of peritonitis this would be impossible: however much we might attempt to draw off the attention, the same excruciating pain would continue, and that pain would be aggravated by even light pressure, and would be far too severe to allow anything like the pressure which is submitted to in the other case. There is another symptom here also worthy of notice, and that is the quality and quantity of the urine; it is pale, clear, and voided in considerable quantity; this is almost invariably the case in all forms of hysteria, but I have never heard of or seen its occurrence in true peritonitis: the urine at the commencement of such an attack may be natural, as in the case of Ann Draper (case 2), but I do not believe it is ever voided so clear or in such quantities as in hysteria; on the contrary, it is generally dark-coloured and scanty. How different are the symptoms in peritonitis, when we come to inquire into their real nature: we have here a rapid pulse, a flushed face, and the features pinched, the tongue becomes dry and coated, and the lips dry—in fact there is a high state of fever, which did not exist in the other case. Here again comes our test, viz., pressure of the abdomen, and we find that in this case it cannot be borne; she lies with her knees drawn up, thus relaxing the abdominal muscles, which really does in some degree relieve the pain; but her attention cannot be drawn away sufficiently to allow even of the slightest pressure without suffering acute pain. The symptoms also do not pass off with the same ease that they did in Charlotte Atkins; the cause in her case was easily removed; but in the case of Ann Draper it remained firmly seated in the shape of scrofulous tubercles in the peritoneum, which of course could not be removed, and consequently the disease proceeded. It may be asked why I suppose that the peritonitis depended upon the deposition of scrofulous tubercles in the peritoneum. There was a constant vomiting of peculiar green fluid, not of that green colour which we see in bilious vomiting, and which is so well known to all who have suffered the horrors of sea sickness; but a peculiar bright, and I may say beautiful, green vomiting, like the colour of malachite.

This I consider to be sufficient to determine the nature of the cause; I do not believe fluid of the same colour is ever vomited in any other description of cases; in addition to this, the girl was of a scrofulous aspect, and this coupled together with the knowledge of the previous disease of a joint, the vomiting during the attack, and the chest symptoms which afterwards declared themselves, would render our diagnosis tolerably certain. Unfortunately there was no opportunity of seeing the termination of the case, as she was removed into the country by the wish of her friends. But to return to Charlotte Atkins: her hysterical peritonitis, if I may be allowed to use this name, was in all probability caused by a loaded and deranged state of the bowels, accompanied with acidity of the stomach, for we find all her symptoms rapidly passing off under the use of purgatives combined with alkaline medicines.

I have said that the hysterical fit is the most striking symptom in hysteria, and undoubtedly it is so, and often in doubtful cases (for instance in certain affections of the joints) the occurrence of a fit opens our eyes to the true nature of the case.

There are, however, other symptoms, which to a careful observer are sufficiently marked without this. We then have the globus hystericus; an irregular appetite, which in some cases becomes morbid, causing the patients to eat substances which in a state of health would disgust them; there is also flatulence, which is almost always present in these cases; there are pains in one part, then in another, and the patient has a disposition to make the worst of her maladies, both present and past; she has also pain between the shoulders, shortness of breath, and cough. Now, these are exceedingly common cases, and I know of a lady at the present moment who has such symptoms, and is always frightening herself about consumption; but here the case is manifest—there is great flatulence, the stomach is loaded with flatus, it presses up the diaphragm, and consequently causes the uneasiness and shortness of breath. With regard to the cough, I cannot help thinking that it is, like many other hysterical symptoms, in a great measure under the control of the will: it is not like the cough in phthisis pulmonalis; it is not like a cough in common catarrh; it is a cough *sui generis*—a short, dry, harsh-sounding affair, more like a bark than a cough.

In cases 3 and 4 we have somewhat similar symptoms. In the case of Blake we have difficult micturition, evidently a want of will rather than of power, for the urine is voided in large quantities and perfectly clear; there is difficulty in making water, shortness of breath, globus hystericus, and all the other symptoms of hysteria. In the case of Sarah Porter (case 4) we have the same symptoms, but the catamenia have disappeared for four months. Now, in these two cases what is the cause of the complaint?—for I believe that in this as in all other cases, this is a most important question; if we can find out the cause, we are able to strike at once at the root of the evil—we remove the cause, and with it the disease. Both these patients were servants of all work, a class of beings almost invariably over-tasked; neither of them was a strong girl, and I believe that they had both been over-worked, and that this was the exciting cause of the hysteria, for in both cases, under the use of tonics combined with rest and good diet, they recovered. In the case of Sarah Porter, when the catamenia had disappeared for four months, the same treatment, together with some aloetic pills, restored her to health. In these cases we very frequently find some derangement of the uterine organs, and this often is the cause of the hysteria; thus we meet with hysteria in cases of leucorrhœa, amenorrhœa, dysmenorrhœa, and menorrhagia; and by removing the exciting cause, together with a little attention to the general health, we may remove the complaint.

That the whole system sympathises with the uterine organs is an indisputable fact and well known to every careful observer; and I think there is no fact which illustrates better than the morning sickness which occurs in the first months of pregnancy.

If, then, the stomach thus sympathizes with the uterus when it is performing a perfectly natural function, how much more may we expect the whole system to be affected when some morbid action is going on in this important part? I will not say that hysteria always depends upon a morbid condition of the uterus; such an assertion would be absurd, for there are many cases in which we can trace no connection whatever—in fact in the cases which I have quoted there is only one, in which any derangement of the uterine functions is mentioned. To enumerate all the various forms which this disease assumes would be almost impossible, for, as I have before said, it may take on the symptoms of almost any disease to which the human frame is subject. I will, however, mention one more case to show the strange forms it may assume, and contrast this with the real disease which it was aping. Eliza Simmonds (case 5) showed herself with symptoms of hemiplegia; there is apparent loss of power in the right side, both of the upper and lower extremities; and there is a history of an injury of the back received a year ago. Hemiplegia is certainly a grave symptom, but a very slight glance at this case will show that here it was only a very inconvenient one, without having the slightest danger attached to it. The urine is clear and copious; the bowels are open, skin cool, tongue clean and moist; catamenia regular. How often do we find matters going on in so comfortable a manner in disease of the spinal chord? I fear but seldom, if ever.

There is another thing also worthy of notice. When there is an injury of the spine, we generally meet with paraplegia of the parts below, either partial or total, according to the degree of injury inflicted; here we have hemiplegia. But supposing that this hemiplegia might depend upon an injury of the spine, an examination of the part being made, and we find the part perfectly straight and sound, bearing percussion on any part; and again we find that not only can she grasp things firmly with the affected hand, to save herself from falling, but she can at times stand just as firmly on the right as on the left leg: there then is a want of will and not of power; not so in hemiplegia: depending upon an organic lesion of the brain, there is then unfortunately not a want of will on the part of the unhappy patient, but literally a want of power.

In these cases of hysteria there is almost always one great insurmountable obstacle thrown in our way in the treatment: I allude to the pity and commiseration which the patient receives from her friends: to them the case appears truly alarming, and it is not often that they can be persuaded to refrain from showing their pity; but the more these patients are pitied the more intractable are their cases invariably.

In this case [illegible] "indulged with lashes witho[illegible] easily be imagined, and no doub[illegible] tolerated by her friends, [illegible] d," because believe that in most cases [illegible] gladly and willingly submit to anything to keep up the appearance of illness; they will allow you to leech and blister them, and they will swallow the most nauseous medicines which the Pharmacopœia affords; and I have read of a case in which a girl allowed herself actually to be trussed up on the operating table for lithotomy, before a whole theatre full of students.

The case of Eliza Simmonds was one which could not be much benefited by a stay in the hospital, and, as might be expected, she received but little good from it; it only served to keep up that love which in such cases they all have of wishing to be thought ill; and as long as they are indulged in this way, so long may we expect the complaint to remain, and in many cases to become worse.

In the case of Laura Schmidt we have hemiplegia but it depends upon a very different cause; here, unfortunately, it depended on an organic lesion of the brain, as was not only shown by the pathological symptoms during life, but was confirmed by the morbid appearances after death. There was want of power here: she could not stand upon the affected leg, or grasp objects with the hand of the corresponding side, neither had she any control over the muscles of that side of the face; there was complete hemiplegia, which set in immediately after the occurrence of the fit, and continued up to the last moment of her life.

Now, in regard to the treatment of hysterical cases, I do not believe we have improved much upon the plan of the immortal Sydenham; steel and the fœtid gums were then employed, and such remedies in most cases are employed at the present time, and with good effect. There are, of course, often complications requiring different kinds of treatment; but, as a general rule, steel, assafœtida, valerian, and galbanum are the principal remedies used; ether is often of great service; and the alkaline medicines to correct the acidity of the stomach, which so often exists. To enter into a detail of all the remedies which are, and have been, used in these cases would be almost endless, and altogether superfluous; I do not consider that medicine can do half so much for these patients as their friends can do almost without it, if they are inclined.

In many cases, especially in the higher classes, amongst whom I believe hysteria is very common, good country air, with cheerful society, exercise, regular hours, and attention to the state of the bowels, are all that is required to effect a cure. The less they see the face of the doctor the better; it only serves to make them think they are ill; in this respect they should have as little encouragement as possible. Some mild medicine may be prescribed—for instance: pil. galban. comp.; pil. rhei. comp. aa gr. v. omni nocte—to keep the bowels in order; and if the friends are sensible people, and will abstain from showing their pity, we may in most cases promise a recovery. But if, on the other hand, the friends will not be ruled by our advice, but will allow the patient to mope by herself and commiserate every little ache and pain she has, I then believe that all our remedies are vain; the complaint, although harmless in as far as life is concerned, is harassing and annoying to both the patients and their friends, and is under some circumstances almost utterly incurable.

Dangerous Sickness on Board H.M.S. Vesuvius.—A notice, under date Halifax, August 15, 1846, was received at Lloyd's on Saturday, stating that "her Majesty's steamer Vesuvius arrived from Vera Cruz, having on board a mortal fever, which occasioned the death of one midshipman and nine of the crew on the passage, and that thirty-nine are at present suffering from its frightful effects. The Vesuvius went round to Melville Islands this morning to remain in quarantine."

Baron Dr. Watteville, Inspector-General of Charities in France, has recently published a memoir, in which he states that there are in France 1338 hospitals and infirmaries, and that their net income exceeds £200,000.

TO CORRESPONDENTS.

W. X.—*We are under considerable difficulty to give an answer, and for several reasons we cannot publish. On the whole the Western Metropolis is perhaps the most eligible; but in any town a* home *is of the first consequence.*

A Student *intimates his wish to leave what he calls an unproductive class in the north-west of London, for a private institution, and asks our aid how he may have his money returned. He had better submit the question to his professors.*

W. M. *sends us a long account of a "hubbub" between two physicians, of no interest for our columns.*

F. S. B. *will find an answer to his question in one of the leading articles of the present number.*

A Worcester Subscriber.—*We believe that, according to the strict letter of the law, the double qualification is requisite. The regulation is frequently evaded, however. A foreign diploma would be of no service, unless obtained by* bona fide *residence and examination in a foreign university; in which case, perhaps, on a proper representation of the facts being made, the qualification might be admitted.*

We think A Constant Reader *had better communicate with the Secretary of the University of London. We cannot undertake to give our correspondent advice, as we do not know on what subjects he is deficient.*

Chemicus *will find the full account he asks for, of Dr. Gardner's amusing proceedings, in the* "Pharmaceutical Times."

*** *The pressure of engagements forces us to postpone answers to numerous correspondents.*

THE MEDICAL TIMES.

SATURDAY, EPTEMBER 5, 1846.

> "Eupolis atque Cratinus, Aristophanesque poetæ,
> Atque alii quorum comœdia prisca virorum est,
> Si quis erat dignus describi, quòd malus, aut fur,
> Quòd mœchus foret, aut sicarius, aut alioqui
> Famosus, multâ cum libertate notabant."—*Horace.*

The numerous letters which we have received, making inquiries into the constitution and prospects of the National Institute, render it a necessary duty, on our part, to enter at some length into the question. We have hitherto given a warm support to the principles of the National Association, and have advocated the expediency of establishing the Institute, because we believed that by such an organization alone could the true interests of the profession be defended, and the triumph of a liberal-minded and scientific body of men, belligerent against corporate monopoly and injustice, be secured. The principles of the Institute are identical with those of the Association: the form alone of working these principles into facts differs. The new embodiment of the professional forces was a necessary step, in the present condition of the movement, when enthusiasm had sobered into energy, impulse into a settled determination, and a resentment of wrong into an undying resolution to avenge it. This is a noble spirit, and required a form for its embodiment, which should be as permanent as its own unchangeable will. The committee have acted wisely; and the profession cannot but applaud the high-souled determination evinced in the promise of this new enterprise. We have not a doubt that every man who is warmed with a proper sense of his responsibilities, as a member of an insulted profession, and who can appreciate the honourable exertions of individuals working for the general good, and for his especial welfare, will lend his assistance to advance so great an undertaking.

There are elements in the profession which can raise the new Institute to the highest rank of scientific and social eminence. The charge has been made that a new college or a new institute, call it which you will, for the general practitioners, must be a failure—a blot upon the fair character of the profession—a degradation of its honour and conventional rank; we repudiate with indignation and scorn such a calumnious allegation. By the establishment of such an institute, the general practitioners will have adopted a mode of keeping high talent and an honoured name in their own ranks; and the old colleges will be no longer able to plume themselves, like the jackdaw of old, in the borrowed plumage of the worthy and distinguished of another class. One of the most elegant writers, sagacious observers, and profound thinkers among modern physicians, Dr. Mason Good, was a general practitioner. It was in this capacity that he hoarded his vast knowledge, formed his intellect, and matured his principles. The most learned writer on materia medica of this or any other time, Dr. Anthony Todd Thomson, was also a general practitioner! Gooch, the great accoucheur, was also a general practitioner! and what, too, shall we say to a greater name than any of these—to that of a man who has swept misery and death from a thousand habitations, dissipated the fogs of pestilence that once overhung the beautiful valleys of our country and converted them into charnel-houses of disease, disarmed the most inveterate enemy to human health that ever scourged our land, whose merits are beyond praise, as his benefits are beyond calculation—of Jenner? He, too, was a general practitioner!

There is a derisive song still extant, written by one Dr. Birch, the enemy of vaccination of that day, in which the philanthropist is stigmatized as "*a Gloucestershire apothecary!*" Since then we have seen a President of the College of Surgeons, himself the most exclusive of all men in sentiment, glad to enrol this splendid name among the luminaries of his college. But the Gloucestershire apothecary is the property of the general practitioners—his labours are the property of the universe, but his fame gems "the badge of all our tribe."

The epithet by which it was sought to disgrace Jenner has, in the present conflict of classes, been often opprobriously used to revile the whole order of general practitioners. An apostate President of a College of Surgeons and a renegade reformer in Parliament have both applied the offensive term, but in vain. Arcades ambo"—they are worthy of each other and their office.

We look forward with great satisfaction to the benefits which this new organization will effect for the profession. It is impossible to predict to what it may lead—what may be the magnitude of the changes and the importance of the advantages which may result from its operations. What it may become we know not; sure we are that there are men at the helm who, thoroughly understanding the difficulties of their position, and the wants and interests of

their brethren, are highly qualified to conduct the good vessel to a safe and permanent haven. The ultimate results will of course depend upon the support which the members of their own class are willing to give them. If *they* are apathetic or timid, not even the most sublime devotion to their welfare on the part of individuals can carry out a tithe of the advantages which would be the infallible consequences of earnest and self-sacrificing combination. Join, then, for your own preservation.

We have observed that the Society of Apothecaries have recommenced prosecutions against illegal practitioners. This is a valuable prerogative of this society, if judiciously employed. It is the safeguard of the interests of the profession, and ought never to be surrendered. Let them wield their power with discretion. We can scarcely believe that they will prosecute certificated men of the United Kingdom; we do not think that they will venture to do it in the face of the great combination in the National Institute. Besides, the time for standing close by distinctive privileges is gone by, and it were unwise of the Society of Apothecaries to risk their popularity. The National Institute invites all to join their ranks, and those who join will, of course, reap the benefit of that protection which public opinion always yields. We have made these remarks in reply to several correspondents who are anxious to know to what extent the National Institute can guarantee their immunity from prosecution. Have no fear.

The profession must maintain an organization ready to act in these critical times in defence of their rights, and prompt to assert their claims upon the Legislature. With the exception of the Institute there is, at present, no such body. The Provincial Association has lost everything but its pretension. It is not now, and never was, the organ of the general practitioners. Governed by a provincial oligarchy, there are no sympathies in its council with the mass of the members. The only grand attempt they ever made to lead in medical politics was diametrically opposed to the wishes of the profession, repugnant to sound principle, and advantageous only to the Pures who arranged the proceedings. The profession scouted the scandalous intrigue: they have been politically dead ever since, and never can revive. They have done nothing for science, nothing for medical government; but they nominate committees who make a practice of inquiring into subjects of general welfare, and at the end of twelve months report that they can do nothing.

The establishment of the National Institute will be a means of promoting kindliness of sentiment, unanimity of feeling on all matters appertaining to professional character, and combination of action for all corporate and political purposes. The notion of exclusiveness and penalty is so thoroughly imbued in professional feeling, so deeply imbedded in our opinions respecting the mode of advancing the honour and respectability of the mass, that no scheme appears that does not inculcate the necessity of firming stringent laws against unworthy practises. The last bill introduced to Parliament by the doting member for Finsbury embraced this vicious principle in its most odious manifestation. It was corporate exclusiveness incarnated, with all its hateful features of self-will and irresponsibility. Any member of the profession proved guilty of giving false evidence, &c., or of crime, might be erased by the registrar from the register, and could never again acquire a title to be placed thereon. There was no court of appeal appointed to which the registrar might be held immediately responsible. It is true, every Englishman can get justice by petition, &c.; but it very often happens that justice loiters so long on the road that the injured man is crushed by the infamy undeservedly cast upon him. We say that this was an unconstitutional and unjust power. The honourable member was, doubtless, aware of the vicious character of the bill, and, when Sir George Grey very properly shelved it, was not sorry to be so courteously extricated from his difficulties. This may account for the crocodile grin with which he greeted the announcement. Imagine Mr. Wakley the registrar, as, most probably, he would have been, what an engine of tyranny and fear he would have wielded!

It is not by penalties that the profession will be advanced in respectability, but by promoting community of feeling, amenity of manners, and general confidence. Let us heighten our professional standard by encouraging the nobler sentiments, and waking the more honourable principles of the man. Let the good be distinguished for its excellence, and the evil will retire in darkness, ashamed of its own deformity. We are quite tired of legislation upon the plan of pains and penalties. The College of Physicians tried it for centuries, and they became at last so exclusive that their exclusiveness enfeebled them, and brought them to the very verge of destitution and corporate ruin. While we shall ever inveigh vehemently against every act dishonourable to our professional character, we must deprecate a return to a retributive system of government.

The National Institute will be peculiarly adapted, by its liberal constitution and by the various qualifications of its members, to carry out these elevating and sound principles; and since a just view of the philosophy of government as well as of the wants of the profession is indispensably necessary to a governing body placed in so onerous and important a position, it becomes the members to elect such men on their council as shall guarantee, by their character, attainments, and repute, the possession of this qualification. We must not go backward; and we know of no body of men that can lead us forward with so much certitude of success as that to which we have already given our allegiance. We must have the best among the best, come whence they may.

"O beata sanitas! te præsente, amœnum
Ver floret gratiis; absque te, nemo beatus!"

We were last week advising our friends the students concerning the management of their health during the period of vacation. We treated the subject generally, and promised, this week, to conclude it more in detail.

The object of vacation, in so far as it concerns the student, is to enable him to recover the health and strength he may have lost by previous confinement and intellectual fatigue; and to give him an opportunity of leisurely recapitulating to himself the several subjects that constituted his study during the past session.

There are some who consider a holiday season as only sacred to utter idleness or unmitigated pleasure-taking. Such people have only a very imperfect estimate of themselves, or of the great objects they ought to live for. To eat, drink, sleep, and be merry, are their cardinal motives. Instead of making the animal and sensual subsidiary to the intellectual, they live just conversely; and, therefore, may be said to flourish, take root, and ripen, only in their inferior natures. Let the student who would desire to be worthy of his name, and the dignity of his calling, remember the classical adage—

"Non vivas ut edas, sed edas ut vivere possis!"

Let him observe, and apply this axiom, not only in its immediate but in its universal relations. Above all things, let him observe it in reference to the intoxicating cup! It has been truly said that this is the bane of Englishmen—and much pity is it that the more intellectual of our community are not beyond the imputation. Men, wise enough to have known better, and exalted enough to make the sin more despicable, have yet not hesitated to commit themselves to reckless dissipation. In the senate-house, wine is affirmed to have been the prime mover of the loftiest flights of eloquence and the liveliest wit; at the bar, its powers are said to have been attested in the most subtle of argument, and in the sublimest of oratory; whilst poets, from Anacreon to Byron, have not only sung its praises, but have availed themselves of its potency to add character to their enthusiasm. The dirty habits of these distinguished sources have, unhappily, infected lesser minds with a desire for their imitation. It is the young and inexperienced who are chiefly induced to copy bad manners, when these assume the air of pleasantry or the authority of fashion. It is very well to quote Horace flippantly, and sing

"Prome reconditum,
Lyde strenua, Cæcubum . . .
Capaciores affer huc, puer, scyphos,
Et Chia vina aut Lesbia."

But there is danger in these things—a danger not the less deadly because of the fascination that hides it. The inheritance of the drunkard is a train of evils more horrible than the visitants at the couch of Orestes; and often it may be fairly said of him—

"Brevis illa voluptas
Abrogat æternum cœli decus"

It rather becomes us to treat this subject in its relation to physical than moral ethics; but it so necessarily involves both, that we should have felt to have been somewhat negligent of duty had we treated it with limited signification.

As it concerns the bodily health of the student, he cannot be too careful of his dealings with that enemy which is prone to steal away his brains. The saying is a true one, but painfully true withal—"Every inordinate cup is unblessed, and the ingredient is a devil." We beg the student to bear this axiom in his memory, when, amid the smiles and welcomes of

friends long since parted with, he is tempted to express his gladness in carousal. Mind and body will both be sufferers for indulgence, and, instead of returning, a *mens sana in corpore sano*, to the scene of his intellectual and physical trial, he will probably take with him a constitution utterly unfit for the privation to be endured.

A concomitant evil of drinking is smoking. Happily, this loathsome practice is, for the most part, abolished in good society; but it still lingers with a few of the less-scrupulous adherents to an offensive old fashion. We remember the time when a cigar in a boy's mouth was considered, by the possessor, a criterion of manhood. If juveniles did but generally know how this dirty indulgence lessened the intrinsic claims to the character above noted, tobacco would soon be out of favour with candidates for a sonorous voice, a well-bearded chin, and a good stock of whiskers. *Verbum satis est!*

In order fully to enjoy the advantages of a few weeks' residence in the country, the student should make it his particular care to rise early in a morning. To hear the lark sing, and to brush the dew off the grass, is no common treat to a man who has been shut out from such indulgences for near a twelvemonth. It is a privilege not to be despised; for none can enjoy it continually, and many never enjoy it all. The liveliness and loveliness with which Nature's face looks into ours, when the sun has just risen to countenance the greeting, is only known to those who have revelled in the pleasure. But it is truly a treat, and worth any of the imaginary, dreary sacrifices, of leaving a warm bed, and washing in cold water. Besides, early rising is unaccountably conducive to health. We have no explanation to offer about the salubrity of morning air over that inhaled at any other period of the day—we only know it as one of those sturdy, substantial old facts we have heard enunciated by many an octogenarian of our acquaintance—which the whole world's experience confirms, and which no prejudiced devotee of night-time and bed-clothes has ever had courage to contradict. Take our word for it, the air that can be breathed before twelve o'clock in the day is worth double of whatever can be breathed after it.

Another point of cardinal consequence to the student, during his country sojourn, is exercise. Of this he cannot have too much, provided he make it consistent with his strength, and the sustenance he takes. Of all exercises, the most healthy and endurable is walking. It puts into action most of the voluntary muscles, and preserves a due equilibrium and energy of limb. The invalid may pursue it at any rate and to any distance compatible with his powers; and the man in robust health may make it the safest experiment upon the best energies of his frame. Riding and driving are very well in their way, but the former is by far the preferable; and the student who labours under, or has any reason to fear, a congested or sluggish liver, will find himself not a little benefited by trotting a high-actioned horse, and not rising in the stirrups. There are various athletic sports that may be pursued with great advantage. Of these, hunting, shooting, cricket, quoits, racket, and rowing, are the chief. They promote free perspiration; accelerate the circulation of the blood; hasten the respiratory function; relieve internal congestion, and tend to balance the chief organic functions. And not only this, but they are a happy diversion from other more quiet pursuits, which are generally followed by consequences the reverse of wholesome.

The student must remember, again, that his vacation is a season as well of intellectual as of physical recreation. The information with which he has stored his mind during the previous session will be very apt, in the main, to slip from his remembrance, unless he take due precaution for retaining it. However vigorously facts may have been learnt, they are not certain of retention, unless occasionally looked after. It is an idle notion to suppose that what is once learnt can never be lost. Properly speaking, nothing *actually* fades from the memory, having once impressed it. But they are *available*, not *hidden*, things of memory that are wanted. Of what use is that knowledge which is deeply buried in the recesses of a man's mind, and not extricable thence at his will? Perhaps such knowledge may never be brought to the surface again, except in the delirium of fever, when the frightened bystanders wonder what the maniac is talking about. To learn anything in such wise as not to be able afterwards to use it *on the instant of the will*, is little better than not learning at all. What signifies it that a stranger tells you he once knew such and such a subject thoroughly, but now knows nothing at all about it? The beggar is not relieved on the score of his previous possessions—and the bankrupt seldom commands credit on the strength of having aforetime deserved it. Available capital is all that is worth having or boasting of. The man whose knowledge is so deep in his head he cannot find it when he wants, is no better off than the fool in the fable, who, having buried his treasure in a field, never got a sight of it again.

We would especially commend these observations to the student, in the hope of inducing him duly to value and retain the knowledge he may have already reaped. Without submitting himself to anything like the intellectual fatigue and harass of his session, still let him not forget the desirableness of never omitting to learn something at any opportunity that offers. *Nulla dies sine linea* should be his motto; it will furnish an unexceptionable rule for his guidance in studentship and ever after! Two or three hours a day will be sufficient for recapitulating the facts gathered previously. In this manner, by a careful reference to text-books, notes, memoranda, &c., the business of the preceding session may be pleasantly gone over. Anatomy, chemistry, midwifery, and the particular manifestations of disease and its particular treatment, may, after this fashion, be brought back to the mind's eye with all the freshness they derived from the dissecting-room, the laboratory, and the bedside. And this process of repetition will not only prevent the losing of knowledge previously gained, but will strengthen its position in the memory, and add to its extent. Rarely can a subject be read, or reflected upon afresh, without the eliciting of some new truth. It is thus, and thus only, that individual knowledge becomes permanent and progressive.

It will be understood by our young friends, that these casual hints, dropped for their service, are the offspring of an anxious wish for their health and welfare. That these utterances may be productive of every good to those whom they concern, is our sincerest hope.

When the day for the reassembling of the classes shall have arrived, we shall, perhaps, take occasion to administer a few more words of suggestion.

MEETING AT QUEEN'S COLLEGE, BIRMINGHAM.

The annual meeting of the governors and friends of Queen's College was held on Wednesday, the 26th ult., in the newly-erected council-room of the Institution, for the general transaction of business. G. F. Muntz, Esq., M P., having been called to the chair, the Report for the past year was read. This, which was a somewhat lengthy document, commenced by congratulating the governors of the school on the progress which had been made, and which still continued steadily to advance. It adverted to the necessity of extended education, to the advancement of the medical profession in science as well as in public estimation, and dwelt on the necessity of a thorough knowledge of the principles of revealed truth, and the advantages of an extended classical education. The report went on to state that the Council, after long and careful deliberation on the subject, have laid down a plan of preparatory or preliminary education, in accordance with those acknowledged principles of instruction which have been adopted in our best and largest collegiate establishments.

The council, in June last, issued the following address:—

"The Council of the Queen's College, Birmingham, deeply impressed with the importance of improving the preliminary education of students in medicine and surgery, propose to establish, without delay, a junior department of their college, in order to afford to young persons intended for the professions of medicine and surgery the advantage of receiving within the walls of the college early instruction in Latin, Greek, and mathematics (with the modern languages and the sciences), from tutors of university education, carefully selected for their abilities and acquirements.

"The students to be lodged and boarded with their tutors, who will have houses provided for them near the college, and who will be responsible each for the conduct of such young persons as are intrusted to him. No particular age is fixed for the admission of students, provided they have gone through the elementary training of a classical school, and can procure testimonials of their good conduct at such school. The students in the junior department will be promoted according to their diligence and acquirements; but it is very desirable that they should be ready for matriculation and for receiving indentures of apprenticeship (where required) by the time they have reached the age of sixteen, in order that they may offer themselves for the degrees of the University of London, the diploma of the Royal College of Surgeons of England, and the license of the Society of Apothecaries, by the time they have attained the age of twenty-one; after which they may commence practice.

"As the Society of Apothecaries in London require the production of indentures from candidates of their having served an apprenticeship of five years previous to examination; and as candidates for their certificates must have attained the full age of twenty-one years; and as the course of study in the senior department of the Queen's College occupies not less than three years for its completion, it is evident that students at the Queen's College should be at least two years in the junior department, and should qualify themselves for begin

advanced to the senior department at the age of eighteen, when they will be admitted to occupy rooms in college.

"The important and valuable privilege of receiving indentures without premium is offered to the students of Queen's College by William Sands Cox, Esq., F.R.S., Dean of the Faculty."

The report then went on to state:—

"The next important subject to which your Council have to direct your attention is an especial mark of royal favour. Your Council have thankfully and gratefully received her Majesty's warrant, under the sign-manual, to issue certificates for the degrees of bachelor of arts, master of arts, bachelor of laws, or doctor of laws, to be conferred by the University of London, in addition to the privilege of qualifying for the degrees of bachelor of medicine and doctor of medicine, previously granted: thus placing your college in every respect on the same footing with King's College, London, and University College.

"Your Council have the gratification to announce that the fever wards, capable of containing seventy-five beds, in connection with the Queen's Hospital, are now completed. From the number of patients registered on its books, and especially from the liberal support given by the Staffordshire iron-masters to the charity, it has become not only of pre-eminent advantage to the public, but presents a very extended field of practical observation and instruction to the students of the college.

"A vacancy having occurred in the office of physician, that there might be neither monopoly nor exclusion, in accordance with a principle hitherto acted upon, the appointment was offered to the physicians of the Dispensary, according to seniority; and Dr. James Sandys, who pledged himself, after a reasonable time for preparation, 'to teach in the college any department of medical education, upon a request to that effect from the Council and professors, *provided such department should not be inconsistent with the province of a physician*,' was unanimously elected.

"*Museums.*—During the past year the Rev. Chancellor Law, your esteemed Vice-Principal, has made some valuable presents to the museums; and, to improve the taste of your students, has ornamented the walls with some splendid paintings. Your munificent Vice-Principal has provided for the use of the students, books, in number about 600, which include some of the best editions of the classics, works on divinity and general literature."

The names of the successful candidates for the class prizes were then announced as follows:—

A medal	Anatomy	Mr. C. W. Izod, Fladbury, Worcst.
1st medal	Mat Med.	Mr. S. Hughes, Dudley.
1st medal	Chemistry	Mr. H T. Whittell, Birmingham.
2d medal	Ditto	Mr. R. Thomason, ditto.
1st medal	Medicine	Mr. A. H Paterson, Stourbridge.
1st medal	Surgery	Mr. Peter H. Bird, London.
1st medal	Midwifery	Mr. G. Bellairs Masfen, Stafford.
1st medal	Botany	Mr. Samuel Hughes, Dudley.
1st medal	For. Med.	Mr. Alex. H. Paterson, Stourbridge.

The demonstrator's prize, Mr. Charles W. Izod and Mr. Edward Nason, Nuneaton (*æquales*); Mr. George Hodges, Ludlow, honorary certificate. The gold medals given by the munificence of the Rev. Dr. Warneford for prize essays are under consideration.

Professor Dr. Bish Davies's prize for the best clinical reports of medical cases, treated at the Clinical Hospital in his practice, has been awarded to Mr. J. H. T. V. Hughes.

Dr. Smith's prize of five guineas, for the best examination in the French language, was obtained by Mr. J. H. T. V. Hughes.

The Jephson prize of twenty guineas was also awarded to the same student, after a severe examination in all the branches of medical science.

In addition to the prizes the following rewards, offered by the Vice-Principal, have been awarded:—Mr. J. H. T. V. Hughes, £60; Mr. G. B. Mason, £45; Mr. Edward B. Machin, Derby, £5; Mr. John William Leacroft, Derby, £5; Mr. Oglethorpe Barratt, £5; Mr. A. G. H. Buckby, £5; and Mr. J. Rogerson, £3.

KING'S COLLEGE.—The subject of the "Deans Prize," to be awarded in the ensuing spring, is "the predisposing and exciting causes of Scrofula." The last prize was obtained by Mr. H. H. Salter, of Bath.

MISCELLANEOUS CORRESPONDENCE.

MEDICAL FOES.

[To the Editor of the Medical Times.]

SIR,—I have been often much surprised at the manner in which the evidence of medical men is received by the legal profession. From highest to lowest, the most profound respect is paid to their opinion, as emanating from men who are scrupulously desirous of implicitly stating the truth, and who give evidence with impartial justice to all.

This dignified position which we hold is liable to be lowered by the Hounslow inquest; for of all men none are so qualified as gentlemen of the bar to judge of evidence, and none so likely to severely censure any misrepresentation of facts to suit party or political purposes.

The welfare of the human frame under every circumstance, appertains to the medical man; and hence it was thought that the coroner's court, being a court designed to inquire into the cause of death, should properly have a medical man to preside over it. For this circumstance, Wakley, under the plea of being a medical man, was elected into that situation.

At this most unfortunate and unprecedented inquest, we have a court presided over by a man purporting to be of the medical profession, and attended by a surgeon who perverted the facts to suit the president of the court.

By the unfair and partial course which was adopted in this instance, great discredit is brought upon the whole medical profession, as it has been frequently argued that this instance shows a want of capacity of medical men to undertake such offices—a supposition calculated to act in the most injurious manner.

However, I deny that he is a medical man at the present time, inasmuch as he undertakes none of the duties of the profession. He holds indeed his diploma of the Royal College of Surgeons, but has long resigned its labours for those of medical agitation and political strife. In fact, he was, but not, strictly speaking, a medical man.

The public simply know that he is called a medical coroner, and may really believe that he is a medical man still engaged in the actual practice of his profession. In this way his unexampled conduct has inflicted a deep blow upon the faculty.

He prosecuted his inquiry till he obtained evidence which suited his purpose, when he took that and neglected the rest. He behaved in a singularly flippant manner, and excited the jury, so that even during the investigation they insulted the Adjutant. He, immediately after the inquest, attended meeting of Chartists and agitators, which explained the motive of his conduct.

Such disgraceful behaviour must be regarded by every member of the legal profession with extreme disgust: for the judge became the advocate, the inquirer the partisan, and a coroner's court was converted into a court of sedition.

Apparently the friend of the medical profession, he has shown himself as its most deadly foe; and whilst under the mask of befriending the profession and under the sanction of its name, he has lowered its dignity, debased its honour, and proved its most violent enemy.

I remain, Sir, your most obedient servant,

A CONSTANT READER.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Gentlemen admitted members on Thursday, August 20:—Matthew Ledger, Charles Edward Verling Goate, Frederick Augustus Kingdon, William Sedgwick Saunders.—Aug. 27: Robert William Carns.

UNIVERSITY OF LONDON.—BACHELOR OF MEDICINE.—FIRST EXAMINATION, 1846. EXAMINATION FOR HONOURS.—The following gentlemen have this year distinguished themselves in the first examination for Bachelor of Medicine at the University of London:—*Anatomy and Physiology*—Habershon, S. O. (Exhibition and Gold Medal), Guy's Hospital Littleton, Thomas (Gold Medal), University College; Hugo, Charles Sayer, University College; Eade, Peter, King's College; Savory, William Scovell, St. Bartholomew's Hospital. *Chemistry*—Habershon, S. O. (Gold Medal, Guy's Hospital; Cammack, T. A (Gold Medal), University College; Eade, Peter, King's College; Bholanoth Bose, Medical College of Bengal and University College; Hugo, Charles Sayer, University College; Littleton, Thomas, University College; Palmer, Edward, University College; Wilks, Samuel, Guy's Hospital. *Materia Medica and Pharmaceutical Chemistry*—Habershon, S. O. (Exhibition and Gold Medal), Guy's Hospital; Burgon, Joseph (Gold Medal), University College; Wilks, Samuel, Guy's Hospital; Bholanoth Bose, Medical College of Bengal and University College; Eade, Peter, King's College; Hugo, Charles Sayer, University College; Palmer, Edward, University College; Cammack, Thomas Armstrong, University College; Gopal Chunder Seal, Medical College of Bengal and University College.

WAR-OFFICE, August 28.—1st Foot—Assistant-Surgeon W. Carson, M.D, from the 85th Foot, to be Surgeon, vice J. Hutchison, who retires upon half-pay. 12th—Staff-Surgeon of the Second Class W. Robertson, M.D., to be Surgeon, vice Booth, deceased. 38th—Staff-Surgeon of the Second Class J. D. M'Ilrie to be Surgeon, vice H. L. Stuart, who retires upon half-pay. 45th—Staff-Surgeon of the Second Class F. R. Waring to be Surgeon, vice Scott, who exchanges. 46th—Assistant-Surgeon G. L. Woolhouse, from the Staff, to be Assistant-Surgeon, vice Reid, who exchanges. 85th—Assistant-Surgeon J. A. W. Thompson, M.D., from the 3rd West India Regiment, to be Assistant-Surgeon, vice Carson, promoted in the 1st. Foot.

HOSPITAL-STAFF. Surgeon R. T. Scott, from the 45th Foot, to be Staff-Surgeon of the Second Class, vice Waring, who exchanges; Staff-Assistant-Surgeon A. D. Taylor, M.D., to be Staff-Surgeon of the Second Class, vice M'Ilrie, appointed to the 38th Foot; Staff-Assistant-Surgeon G. S. Beatson, M.D., to be Staff-Surgeon of the Second Class, vice Robertson, appointed to the 12th Foot. To be Assistant-Surgeon to the Forces: Assistant-Surgeon J. Reid, from the 46th Foot, vice Woodhouse, who exchanges; J. M. A. T. Croft, vice Taylor, promoted; C. R. Matthew, vice Beatson, promoted.

MORTALITY TABLE.

For the Week ending Saturday, August 5, 1846.

Causes of Death.	Total.	Average of 5 summers.	Average of years.
ALL CAUSES......	880	808	968
SPECIFIED CAUSES...	888	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases............	254	201	188
SPORADIC DISEASES.			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat........	95	99	104
Diseases of the Brain, Spinal Marrow, Nerves, and Senses..............	157	155	157
Diseases of the Lungs, and of the other Organs of Respiration	188	227	294
Diseases of the Heart and Blood-vessels........	22	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	101	87	72
Diseases of the Kidneys, &c.	10	6	7
Childbirth, Diseases of the Uterus, &c.	10	9	10
Rheumatism, Diseases of the Bones, Joints, &c. ..		6	7
Diseases of the Skin, Cellular Tissue, &c.	1	1	2
Old Age..............	20	52	67
Violence, Privation, Cold, and Intemperance......	13	26	26

No. 365. SUMMARY. Sept. 12

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

ACADEMY OF SCIENCES.

Meeting of August 31; M. Mathieu in the Chair.

Diseases produced by the Fabrication of Lucifer Matches.—M. Dupasquier, of Lyons, stated in a written communication, that the attention of the public having been of late drawn to this subject, he had been induced to examine carefully the Lyons factories, in order to ascertain how far the assertions made by various physicians were correct. He had acquired the certainty that in the city of Lyons the workmen do not present those alterations of the maxillary bones observed in other parts of France, and in Germany; but that they are subject to a mild form of bronchitis, which yields without obliging the men to abandon their occupations, even for a short time. Dr. Dupasquier attributes the necrosis of the jaw, stated to occur in the German and Parisian factories, to the presence of arsenic in the phosphorus employed in the trade.

The remainder of the meeting was consecrated to subjects foreign to medical science. The following communication made by Professor Arago, seems to us, however, to be possessed of sufficient interest to deserve a place in our columns:—

Artesian Wells.—M. Arago stated that the town council of the city of Montauban had in the course of the year 1845 ordered an artesian well to be bored, and that in July, 1846, after *eleven* months' labour, water had not yet been obtained, although the instruments had already penetrated *one hundred and seventy* metres in depth. M. Fauval, a citizen of Montauban, proposed a new and very simple method, which had been crowned with the most brilliant success, and which rested entirely upon the theory of the siphon. A hole of a few feet in depth being first dug in the ground, the screw, containing a tube, was introduced, and the hole being filled with water, around the instrument, liquid was poured into the cavity of the screw by means of a forcing pump, and the water passing rapidly through the excavation carried away with it the stones and fragments created by the unceasing action of the screw. By this very simple method the necessity for the removal of the instruments was entirely obviated throughout the whole process; in the space of *fifteen days* 170 metres were perforated, and the gush of water obtained.

ACADEMY OF MEDICINE.

Meeting of Sept. 1. M. Roche in the Chair.

The Plague.

M. Prus, the reporter, remarked, that in consequence of the vote passed at the last meeting the commission had met, and had resolved to divide the Academy on this day, in order to ascertain how far the assembly disapproved of the general tendencies of the report. The commission did not feel justified in making in its conclusions any but secondary modifications, and, if these did not satisfy the society, it was better to settle the matter at once by a formal vote and the nomination of a new commission. M. Prus, therefore, moved the following resolution:—"The Academy declares that the report may be considered as opening a sufficiently broad field for discussion, and for the statement of its opinion on the subject of the principal questions involved in the study of the plague and of quarantines."

After a short debate this motion was carried, and the meeting adjourned at a quarter after four.

HOPITAL DE LA CHARITE.

Clinical Lecture, by Professor Velpeau.

We extract the following general remarks on phlebitis and erysipelas from a recent lecture of the professor:—

Phlebitis.—This malady had been formerly divided into two forms—internal and external phlebitis; but these two denominations did not by any means present the same distinctions in the views of ancient and of modern writers. Twenty years ago, Professor Velpeau was one of the first to propose the denomination. External phlebitis refers not to inflammation of the exernal veins, but to phlogosis of the external coat of the venous structure; and internal phlebitis does not indicate inflammation of the deep-seated veins, but inflammation of the internal coat of any venous canal. This distinction is of the greatest importance in the history of the malady; external phlebitis may be looked upon as a trifling disease in comparison with the other form of venous inflammation. The great danger incurred in the latter evidently depends upon the formation of pus and its passage into the circulation; an occurrence which is sometimes, though too seldom, prevented by the production of adhesions in the vessel by which the purulent matter is incarcerated. The prognosis of these two varieties of the same affection being so widely different, it is useful to recal to the mind the chain of symptoms by which each of them is characterized. In external phlebitis, a swollen, red, and painful chord may be seen and felt along the course of the vessel, without any symptoms of general disturbance. Internal phlebitis, on the contrary, is ushered in by shivering, frequency of pulse, and adynamia. The course of the vein may sometimes present the hardness noticed in the other form, but it is never so evident; a fact readily accounted for by the knowledge of the seat of inflammation. In a word, in external phlebitis the local symptoms are very well marked, and the general symptoms indistinct; in internal phlebitis the signs of general suffering of the system first awake the attention of the physician, before the local symptoms have made their [illegible]. The prognosis of internal phlebitis requires still a greater degree of gravity when it is recollected that the means of arresting its progress are yet to be found. Many methods of treatment have been proposed, none of which hitherto have yielded satisfactory results. Amongst these methods we may mention compression of the vein—a plan which remains ineffectual on account of the diffused nature of the inflammation; and division of the vein, which has also been thought of: this is sometimes a dangerous step, predisposing to the production of the disease it is intended to cure. We can easily conceive what would be really useful, but we cannot so readily find an agent to accomplish it: what is required is a drug which, by its presence, would neutralize the bad effects of the passage of pus into the blood. In the present state of science we can only say that most of the persons attacked with internal phlebitis are lost. As to the external form, it is cured by local antiphlogistic measures: resolution is often obtained, but sometimes an abscess forms around the inflamed vessel.

Erysipelas.—The cases of erysipelas observed in the wards during the past season have been twenty in number: five of the patients entered the hospital suffering from simple erysipelas of the head, and were all cured. The fifteen others had erysipelas in the hospital as a complication of wounds or operations; of these fifteen, eight died; hence a remarkable difference of prognosis should be made between cases of erysipelas complicating wounds, and the idiopathic variety. Even when it attacks the head, it is a less dangerous disease than is commonly supposed, and may generally be cured in the space of eight or ten days, whatever may have been the treatment employed. This assertion will, doubtless, be considered strange, but we purposely insist upon it, because many physicians labour under the delusion that they cure erysipelas by various methods: one will recommend leeching and venesection; another has unbounded confidence in emetics; and in our opinion all are in error, merely because they have not noticed the habitual duration of the disorder when no treatment whatever has been resorted to. In two of our latest patients the disorder lasted four or five days. Another was admitted about the same time; we gave her an emetic, but we do not flatter ourselves that we cured her—most assuredly she recovered spontaneously. The object of the treatment is merely to curb the severity of the symptoms, and to prevent the occurrence of any dangerous complication; but it is a very difficult question, and a very doubtful one, whether by any treatment the natural length of the malady can be shortened; indeed it is impossible to say beforehand what will be its probable duration. A woman was lately admitted who twice previously had been similarly affected: the disease lasted the first time twelve, the second fourteen days; she entered our wards, and in four days, without treatment, she was well. Had we used any drug we should, of course, have attributed to it, and erroneously, the rapid cure of our patient.

Treatment of Erysipelas.—Such is Prof. Velpeau's opinion of the inefficacy of all treatment of this affection. But this discouraging scepticism is not prevalent amongst French practitioners; at the Hospital St. Louis, M. Jobert employs with much success, independently of revulsion on the

intestinal tube, local [illegible] of nitrate of silver ointment, in the [illegible] of ʒj., ʒij., or ʒiij., to ℥j. of lard. [illegible] natory symptoms —namely, the pain an[illegible] n—are rapidly subdued, the epidermi[illegible] y, and the skin resumes its natural [illegible] This ointment M. Sabat also applies in many cases of chronic or even acute orchitis, with much advantage.

TREATMENT OF COLICA PICTONUM.—Dr. Gendrin, physician of the Hospital of la Pitié, whose researches on saturnine intoxication have attracted of late years much attention, states that colica pictonum, uncomplicated with cerebral symptoms, always yields in a space of time varying from three to six days, to the internal exhibition of sulphuric acid, in doses of ʒj. to ʒjss. daily, diluted in a quart and a half of water. The results of the treatment are not so rapid or so satisfactory where the skin is covered with a layer of metallic residues; these shou[illegible]y with alkaline baths at the same time that the acid is given internally. M. G. was led to the use of sulphuric acid by the knowledge of its chemical action on saturnine salts, which it renders insoluble, and, therefore, inert. He also thinks that the most efficient method which can be adopted to preserve from the disease the workmen engaged in the preparation of white or red lead, is to oblige them to drink two or three tumblers of sulphuric lemonade in the course of the day; to perform frequent ablutions of the hands and face; and to use in the factories a dress different from that which they wear out of doors. M. Bertini, physician of the Hospital of Saint Lazare at Turin, and MM. Priesso and Solari at Genoa, have obtained from the application of Dr. Gendrin's method the most decided benefit.

MEDICAL SOCIETY OF EMULATION.

M. LARREY, President.

WOUNDS INFLICTED DURING DISSECTION.—M. Blatin presented to the Society, gloves, made of a thin sheet of caoutchouc, destined to guard the hand of the anatomist against injury from wounds during dissection, or from the contact of noxious substances in *post-mortem* examinations. The tissue of the gloves is so fine as not to interfere in any way with the movement of the fingers, and to diminish only in a very slight degree the sensation of the hand.

UTERINE DISEASE DURING PREGNANCY, BY M. FORGET.—The history of the influence of fibrous bodies and of polypi on the progress of pregnancy, and on the function of parturition, has been the object of Dr. F.'s researches. With regard to fibrous productions, their danger may be considered to be in proportion to their size and to their number: when their volume is small they do not materially interfere with the functions of the gravid uterus, nor prevent its retraction after accouchement; the same innocuity will be observed when the fibrous bodies lie under the peritoneum, by which they are alone attached to the womb. These fortunate circumstances are not, however, always met with, and when situated in the uterine walls, they often become a cause of abortion, and always render labour difficult, and may produce fatal hemorrhage. During the last stage of pregnancy the increased phenomena of nutrition, occasioned in the uterus by the development of the foetus, explain the rapid growth of the tumours, and the consequent severity of accouchement. As to polypi, M. Forget considers as a demonstrated fact that polypi, even very large, situated in the womb or in the vagina, do not prevent impregnation, and cause but little uneasiness during pregnancy: they seldom produce abortion. When the polypus remains in the womb after delivery, the danger is great for the mother; but it is the life of the child that is endangered when the polypus has descended into the vagina. In the latter case the surg[illegible] should n[illegible]t operate until the womb has resume[illegible] natural dimensions; but when the tumour o[illegible]pies the uterine cavity, and abundant hemorrhage is present, surgical art must interfere for its removal.

IMPERFORATE ANUS.—On August 23, a seven-months' child, aged twelve hours, was brought to the Hôpital des Cliniques, and admitted into the surgical wards. Since its birth the infant had constantly vomited stercoraceous matter; the anus still existed, but at a depth of eight lines was obliterated by a transversal membrane. Examination with the finger did not permit the surgeon to detect the presence of any swelling by which he might be guided in any attempt to open the intestine. A female catheter was forced through the membranous partition, and readily penetrated eighteen lines deeper, without, however, bringing away any meconium, or any fluid. M. Voillemier—feeling convinced that some other impediment existed to the progress of the contents of the digestive tube besides the imperforate anus, and uncertain of the seat of the anatomical alteration—did not perform M. Amussat's operation for lumbar anus. The patient died on the same day. On dissection, the stomach and intestines, in a length of eighty-five centimètres (two feet five inches), were found in a state of considerable distention, chiefly occasioned by the presence of gas. The rest of the intestine (ninety-two centimètres—two feet eight inches) was very much contracted, having only the volume of a quill, and contained a thick, viscid mucus. These two portions of intestine did not continue into each other, but were separated by an interval of two inches. Two other portions of the intestine also floated freely in the abdominal cavity; one was two inches, the other three and a half, long.

CONVULSIONS AND PREMATURE DELIVERY.—On the 12th of March, 1840, a woman was brought to the Hospital St. Louis, in a state of insensibility, and admitted into M. Malgaigne's wards. She was perfectly unconscious, but affected with violent convulsions attended with distortion of the face and loud cries. The convulsions were continuous, and affected both sides of the body without any relaxation whatever; the womb al[illegible]took of the convulsive state of the muscular system; the uterus could be felt through the abdominal wall, hard and contracted; no vaginal discharge was present; the os tincæ was completely effaced, and the head of the child was recognised. But a new order of convulsions, of an epileptic form, appeared twice during the first three hours after admission; the head was dragged backwards; the face grew first pale, and then livid and purple; the eyeballs were drawn upwards, and the general character of the convulsions of the extremities became quite different from what they had previously been: after each attack, the duration of which was about five minutes, a period of coma followed; twelve ounces of blood were taken from the arm, but venesection was followed with two other fits: the pulse marked 130; the fœtal heart and placental murmur were distinct, and the neck of the womb dilated to the size of a two-franc piece. The accouchement took place spontaneously during the convulsions, and without the amniotic fluid being discharged; the ovum was expelled entire; the child, a stillborn fœtus, fourteen inches in length. The loss of consciousness of the mother persisted for twenty-four hours, but the convulsions did not reappear; and it was only four days after her admission that she was able to give a lucid account of herself. She had been confined four times, and two of her children had died of convulsions shortly after birth—one being born at seven months and a half. She had never before had convulsions. One of her sisters was subject to fits before she first menstruated, and another had given birth to six children, who *all* had died of convulsions: the patient was well on the 22nd of March, and was discharged.

DAN. M'CARTHY, D.M.P.

America.

CHANGE OF COLOUR IN A NEGRO.—Dr. Savage [illegible]ds a case in the "American Journal of Medical [illegible]nces," in which a negro, a nati[illegible] of the Grebo tribe, inhabiting Cape Palmas and its vicinity, in North Africa, underwent a remarkable change in the colour of his body. The complexion of this man's father was decidedly black, that of his mother "*yellow*"—the two extremes observable in the tribe, and between which there is found almost any variety of shade. His own natural complexion was black, not presenting quite so deep a hue as his father's, being a shade or two lighter, perhaps, than the blackest. He was about twenty-five years of age; rather under the average height of his tribe, measuring five feet and four and a half inches; his proportions were good, muscles well developed, and he had always appeared to be in fine health. In the beginning of March, 1844, in the evening, soon after retiring from his work, he was suddenly attacked with an acute, deep-seated pain in the head, back of the forehead and eyes, accompanied with vertigo. This was soon followed by a violent ague, and a distressing spasmodic action of the muscles of the throat and chest, attended by a suspension of the functions of the mucous membrane lining the laryngeal and pharyngeal passages. He felt an extreme dryness in the fauces, and as if a bone were lodged in the throat, depriving him of the power of free deglutition and respiration. The pain in his eyes was aggravated during the night to an agonizing degree; the lids convulsively closed, not leaving the power of reopening them. This was accompanied or succeeded by a flow of tears so profuse that the attendants thought the *balls must have bursted*. These symptoms continued for a week with more or less severity, except the ague, the paroxysms of which were of daily recurrence. The intensity of the symptoms generally during the period varied with the temperature of the surrounding air. The heat of a fire and of the direct rays of the sun was intolerable, and, whenever so exposed, he was instantly driven to seek a cooler position. During the first night of the attack, an extremely annoying and painful sensation was experienced immediately under the skin, represented to be like the pricking of needles, and followed by an intense itching. The numerous papillæ of the skin then enlarged and gave to it a feeling of cutis anserina. This eruption appeared first on his neck, and thence rapidly spread over his body, and continued also through the week, varying in degree with the aërial temperature. By the eighth day there was a subsidence of the symptoms generally, and the process of desquamation began. This continued three days, during which time the cuticle came off freely, in pieces of half an inch in diameter, [illegible] to a very minute furfuraceous exfoliation, [illegible]uld be easily removed by the hand or other m[illegible]s. His body now had lost its identity, and, instead of the complexion of a negro, presented a dingy yellow, like that of the sole of the foot after having been exposed to the action of salt water.

After this change, the dull yellowish white characteristic of the eye of the negro was lost, and the clear white or bluish tinge of the eye of the white man became present. About a month after the first attack the same symptoms recurred slightly, and desquamation again proceeded. The cuticle thrown off on this occasion was thinner than that on the former, and the colour resulting (which still partly continued when the report was drawn up) was not really white, except on the back of the hands, on the wrists, feet, and ankles. The skin on the hands was free from that coarseness and corrugated appearance peculiar to the race, and was delicate and soft, showing through the new cuticular medium the blue veins beneath. On the lower part of the back, on the abdomen, front of the thighs, and calves of the legs, there was a dark hue, much increased, however, by the thick black hair on those parts, which appeared to be but little, if at all, changed. On most other parts of the body there was a dull white; in some places a decided white, with considerable delicacy and softness of skin. His aspect was not that of a mulatto, but—with the exception of his decidedly marked negro features, and the crispness of his hair—that of a white man. He was extremely sensible to the heat of fire and the sun. His face and feet were inflamed, and the latter much swollen from the influence of the sun. The soles of his feet and palms of his hands were very tender, making it painful for him to walk or handle rough objects. His toe and finger nails showed the mysterious influence at work in his system. The process of detachment was regularly though slowly going on; a distinct line of

demarcation was visible between the new and old nails; the former having advanced about one-third the distance. The posterior portion of the latter presented a flaky appearance, showing most clearly their laminated structure. The new portion, in its flatness, clearness, and delicacy, exhibited a striking contrast to the old, which was convex, dull in aspect and thick. The hair was not much changed. The border only of the hairy scalp came off, the superior portion, cuticle, and hair remaining unchanged. Some weeks afterwards the hair on the surface generally became white. No other change had occurred except that produced by exposure to the sun, in consequence of which the cuticle had cracked in several situations, especially in the feet. Three months from this time, on again examining the patient, numerous small spots of a chestnut-brown colour were found on different parts of his body. These were unattended by any elevation of the cuticle, and increased more in number than in size, running into patches in different places which were a shade or two darker than the recent spots. They appeared first upon the wrist, where they had become so numerous as to reach in patches upwards, to a distance of six inches or more. Their appearance was then on the back of the arm, head, and neck successively. A continuous narrow line of black extended from the hair on each temple down to the cheek, which, in contrast with the adjacent white skin, presented the aspect of whiskers. Spots and patches of a dark brown appeared also on the back. The hands, with the exception of a few spots on their back, were white. The front of his thighs, his calves, and shins were thickly spotted, and the complexion of the skin generally seemed to be a shade or two darker, not by the tanning effect of the sun, as is seen upon the white man's skin, but evidently more deeply seated. He said that bathing in the sea so far macerated his skin that he could rub off the cuticle and restore the whiteness. Two months after, the general shade of his skin was somewhat darker; and in many places, where before there had been spots only, patches now appeared. The patches that existed at the last examination had considerably increased in size, and were of a decided black, even more so, it was said, than his natural complexion. Spots were now seen scattered over the whole surface, varying in shade, from a light brown to a black, according to their age. In all cases the colour was dull, wholly devoid of that oily and shining appearance usual in all healthy and cleanly negroes. The calves of the legs, the thighs, the abdomen, back of the arms and neck, sides of the forehead, and upper lip, were black, though presenting in various places irregular patches of white.

The colour of the hair was restored with that of the skin, and the patient said that the white hairs fell off and the black appeared as the change in the cuticle advanced. Four months after, when the case was last seen, the dark spots were progressively extending. The man's health was excellent

REMARKABLE CASE OF INJURY OF THE HEAD.—Dr. Forman, in the "American Journal of Medical Sciences," records a case in which a young man, aged 17, while preparing for a shooting party, accidentally discharged his gun, and the contents (duck shot) passing the left side of his head, tore away the ear above the concha, together with a portion of the scalp and temporal muscle, making a frightful wound in the integuments, and producing a compound comminuted fracture and depression of the lower and middle part of the parietal bone. He leaped into the air and fell upon his face on the ground. He was insensible, convulsed, and bleeding profusely from the wound. There was some hemorrhage also from the nostrils, so that, perhaps, he lost in all a quart of blood. His pulse was imperceptible. Before the arrival of medical assistance, however, reaction had taken place. He had vomited several times, and spoken frequently, exclaiming, "Boys! Boys!" and once, when addressed by name, he answered "What?" The wound was occupied with coagulated blood, and a small quantity of brain; the fracture comprised a little more than an inch in width of the inferior part of the parietal bone, and was bounded posteriorly by a line, extending from the centre of the meatus auditorius externus to nearly a right angle with the sagittal suture, from which there proceeded under the integuments anteriorly two fissures, including between them two deeply-depressed fragments, the inferior, or that next to the squamous suture, being much the larger. The blood was washed off, the chasm filled with lint, and a bandage applied, during which the patient evinced great sensibility, exhibiting signs of pain on the slightest touch of the parts. After the completion of the dressing, his pulse was small and feeble. Through the remainder of the day and night, and the following day, he was partially comatose, though easily aroused; his breathing was slow and at times stertorous. He vomited occasionally, and the matter ejected was mixed with blood. His pulse was slow, beating but forty-three strokes per minute, and very feeble. The pupils nearly natural in size, and not devoid of sensibility to light. Temperature of the skin below the healthy standard. On the evening of the second day, after a careful examination of the fracture, it was agreed that a portion of the bone, large enough to allow the use of the elevator to restore the depressed pieces to their natural level, should be removed by means of "Hey's saw," while symptoms should dictate the treatment to be afterwards pursued. By free use of the saw, a somewhat triangular portion of the parietal bone, about an inch in its longest direction, and three lines long at its base, was removed. The larger fragment was elevated to its proper position, while the smaller, of an irregular quadrilateral figure, about eight lines by four, beaten down upon the dura mater, and entirely detached from its natural connection, was removed. About three lines above the superior edge of the elevated fragment, the pulsation of the brain brought into view, through a rent in the dura mater, another piece of bone, a scale, almost entirely from the inner table of the skull, of an irregular figure and half an inch in its greatest diameter. On the removal of this a gush of brain followed, which continued to flow, until half a wineglassful was computed to have been lost His pulse rose immediately to eighty strokes in a minute, and the night was passed in alternations of coma and restlessness. The wound discharged so much blood and brain that the dressings and pillow were saturated with them.

On the second day after the operation, the adhesive straps used to secure the dressings were all found detached, and a large fungus cerebri was seen projecting through the aperture in the cranium. This substance was not composed of *pure* brain, nor covered by any of the membranes of that organ. Neither was it formed of coagulated blood, as Mr. Abernethy supposed some of these productions to be; but it was an organized body, springing from the brain, and subsisting by its own mode of nutrition. The whole surface of the wound, the pericranium, the temporal muscle, and the edges of the scalp, poured out an abundant secretion of pus. The ulcer was carefully cleansed, and dressed with simple cerate, while compresses wet with lime-water were applied to the fungus after the manner of Sir A. Cooper. The same evening consciousness returned to a certain extent, and the patient answered questions put to him. On the 5th of October, nine days after the accident, the patient had convulsions of the neck and face; and on the 6th, consciousness returned, but motor hemiplegia of the right side supervened, and he entirely lost the power of articulation, which he never regained. On the 8th there was an escape of fetid gas from the wound in considerable quantity. The bones in the neighbourhood of the wound were found necrosed. The fungus continued to increase On the 14th a ligature was put round the base of the fungus This came away on the following day without diminution in the size of the fungus *Consciousness continued perfect.* On the 17th the fungus sloughed off to a level with the skull, and was removed with the dressings, but so rapid was its growth that before they could be reapplied it had sprung a quarter of an inch. On the 20th the patient had passed an uncomfortable night, having slept but little, and being extremely restless when awake. *Consciousness perfect;* eyes and countenance natural. Head free from pain and every uneasiness, even when rapidly rotated. Skin heated, and tongue dry and brown. Pulse 120, and weak· Wound discharging an abundant [illegible]. Fetor much lessened. Fungus greatly enlarged. Its upper portion had the appearance of the cineritious part of the brain, while the lower was [illegible] tender, and fibrous. The dura mater much thickened, very vascular, and almost as firm as cartilage. He continued much in the same state until the 28th of October, thirty-three days after the accident, when he was in the following condition:— Had scarcely slept during the night. Countenance, however, pretty good. Pulse 100, distinct, and moderately full. Skin cooler than yesterday. Mouth and tongue parched. No appetite, and very restless. On removing the dressings the fungus was no longer to be seen, but the bones, denuded and dead, with the opening in them unobstructed, came directly into view, permitting a more extensive survey of the interior of the skull than, perhaps, was ever before made upon living man. The extent of the cavity antero-posteriorly was estimated at four inches. Transversely the falx-cerebri was visible, and bounded the view in that direction. The outline of the apophysis of Ingratius was seen anteriorly, and that of the edge of the tentorium posteriorly. Pending from the bone, near the posterior margin of the cranial aperture, was a flap of the dura mater, hanging like a curtain into the cavity, and shutting off in a degree the prospect towards the occiput. This may have been the remnant of the more fibrous part of the fungus, as no portion of it was found in the dressings. The floor of this cavity was formed of a thin stratum sloping inward and downward toward the cerebral ganglia, from the lower edge of the aperture in the cranium, at an angle of about forty-five degrees. Some shreds of the dura mater, detached in part from the internal surface of the skull, were seen hanging into the cavity, as also a few vessels stretching across its walls in different directions, chiefly, however, along the falx. His eyes were glassy and unsteady. His head was occasionally agitated by an involuntary rotatory movement. The parotid gland, on the injured side, was very much swollen. *Sensibility and consciousness perfect.* No pulsation of the brain.

On November 1st he saluted Dr. Forman with a smile; but on the 2nd he recognised no one. Countenance hippocratic. Respiration short and hurried, voice guttural. Muscular agitation of the whole of the left side, particularly of the arm, violent. The muscles of the paralyzed limbs were affected by a tremulous shudder. Their contractions were not sufficient to move the members to which they were attached. Lower jaw moved as in mastication. Skin hot and purple. No discharge from the wound, which was of a leaden colour. Bladder not evacuated for the last twenty-eight hours. A catheter was introduced, and rather more than half a pint of urine drawn off. He manifested great sensibility of the urethra during the introduction of the instrument. As the day advanced, the muscular movements subsided; he moaned incessantly; his skin continued purple and intensely hot over the thorax; his pulse became scarcely perceptible; and at two o'clock he ejected, by a sort of regurgitative effort, a mouthful of yellow fluid, threw back his head, and expired.

Autopsy twenty-two hours after Death.—The inferior edge of the cranial aperture was situated at the point of intersection between two lines drawn, the one perpendicularly to the external meatus auditorius, and the other horizontally backward, from the external angular process of the os frontis. Extending upward and backward, its entire length was about an inch and a half, and its width not quite an inch. By removing a circular piece of bone, in advance of this, for the purpose of inspecting the dura mater *in situ*, it was found to be detached as high up as the origin of the temporal muscle down to the base of the skull, and forward as far as the frontal bone. One part of it hung down into the cavity, very much thickened, and gangrenous. The upper half of the cranium being removed, nearly half a gill of sero-purulent fluid escaped through a rupture in the dura mater covering the anterior lobe, which became flaccid and collapsed. A small quantity of

purulent matter was also found beneath the dura mater on the under side of the medulla oblongata. At the surface of the brain, next to the cranial aperture, it was completely destroyed to the extent of two inches all around. The lower half of the middle lobe was also entirely destroyed, with the exception of a thin stratum at its base, not more than a quarter of an inch in thickness, meninges included, which was also diseased. Introducing the finger into the cavity and exploring it, it was found to extend the whole length of the lateral ventricle. Extending the dissection by removing the upper part of the hemisphere above the corpus callosum, two sinuses were discovered, leading from the main cavity. One of these extended into the anterior lobe, was about two inches in length, and half an inch in diameter. It was the orifice of this sinus observed before his death, and from it came the pus which escaped through the dura mater. The other sinus was situated in the posterior lobe, extending upward and backward very near to the surface, just above the torcular herophili, an inch and a half in length. In the bottom of this sinus were found two pieces of lead, very much flattened and indented together, about equal in size to one of the shot with which his gun was charged when he received the wound. A spicula of bone, about the size of a mustard seed, was also found here. In the posterior lobe there was not more than a cubic inch of healthy medullary substance, most of it being entirely destroyed, and the rest converted into a semi-purulent amorphous mass. About one-third of the anterior lobe and two-thirds of the middle were in the same condition. Examining the lateral ventricle, the corpus callosum, as far as the *raphé* on the injured side, was destroyed. The septum lucidum and anterior part of the fornix were also destroyed. The hippocampi were too much diseased to be distinguished. The upper half of the corpus striatum was very much softened; on scraping this off, however, the diverging fibres of the corpus pyramidale were beautifully displayed, spreading out through the grey substance of the ganglion, resembling the striated appearance of our common marine shells. With the exception of the commissura mollis, the thalamus was more healthy. Between the two thalami there was no connection. The veum interpositum and choroid plexus of the lateral ventricles were destroyed. There existed, therefore, a communication between all the ventricles and the wound. The right hemisphere, with the exception of a convolution above the corpus callosum (which was "curdly" and friable, and those around its lower external surface, which were inseparably adherent) was healthy. The cerebellum and parts described on the base of the brain were all healthy except the corpora albicantia. Between the infundibulum and pons there was nothing to be found like a rounded body or an eminence. Such was the condition of the parts when dissected; the dissection, however, owing to the softness of the brain when first removed from the skull, was not completed for several days, and during this time it was preserved in alcohol.

To the above narrative Dr. Forman appends the following judicious remarks:—

"To all who witnessed this case it was a matter of great astonishment that the patient should have lived so long, preserving his mental and corporeal functions so little impaired. The right side was paralysed only as regarded its motion, and that imperfectly. Its sensibility was very little if at all impaired. These phenomena would corroborate the conclusions that the origin of the locomotive influence is in the anterior columns of the cerebro-spinal axis (inasmuch as they were the parts chiefly injured), while sensibility resides in the posterior.

"How was the abolition of the power of speech to be explained? Was it owing to the diseased condition of the cornu-ammonis and temporal lobe, in which Foville locates the seat of this variety of muscular motion?

"In consequence of his entire inability to articulate, and the paralysis of his right arm, it was impossible to ascertain the exact degree in which he retained his intellectual faculties. Signs were his only media of communication, and these, it must be confessed, were not always the most expressive in representing the ideas he wished to convey. From the eleventh day after the receipt of the wound, until the second or third before his death, he gave every indication of consciousness and reason. He recognised his friends and took pleasure in their society. Among those who watched and nursed him, he preferred the services of some to those of others. Failing on one or two occasions to make known his wants by such signs as he used, he attempted to write them with his left hand, but after several illegible efforts he gave it up in despair. At another time a proposition was made to him in writing, one word in which he could not decipher, when, pointing to it with his finger to have it explained, he expressed his approbation of the proposal, and gave it his ready assent.

"It is greatly to be regretted that the extension of the injury to the different parts of the encephalon cannot be determined in the order of its invasion of them, and the succession of the symptoms in their relation to this order, as the case of Mr. B. would then be one of the most instructive, as it now is one of the most extraordinary, which the annals of medicine record. On the seventh day from the occurrence of the accident, the secondary symptoms consequent to it were first manifested; and, by supposing the irritation from the wound at this time to have just reached the hippocampi, the opinion of Foville will be thus far confirmed, for on the evening of that day articulation became embarrassed, was entirely suspended on the next, and never afterwards recovered. On the ninth, convulsive movements of the muscles of the face and neck occurred, and on the tenth, motor hemiplegia seized the patient, both of which are readily explained upon the supposition that at this time the corpus striatum became involved. With speculations upon the possible, however, Science will not be satisfied. Her stern demand is facts, and having given these, I leave each one to draw such conclusions from them as will be most satisfactory to himself."

ORIGINAL LECTURES.

A Course of Lectures on Hernia,

By JOHN FLINT SOUTH, Esq.,
Surgeon to St. Thomas's Hospital, and Professor of Surgery to the Royal College of Surgeons.

(Delivered in the Theatre of the College, and revised by the Professor for the MEDICAL TIMES.)

LECTURE V.

(Continued from page 385.)

Operations for strangulated inguinal rupture: Incision to be commenced high up; division of superficial fascia and cremaster muscle; difference of thickness of coverings; mode of opening the sac division of stricture; directions in order to avoid blood-vessels; Sir Astley Cooper's rule; procedure when the stricture is in the canal or at the internal ring. Femoral Ruptures: Definition—internal femoral rupture; relation to blood-vessels; cases in which more than one femoral rupture exist; co-existence of femoral and inguinal ruptures.

External Femoral Rupture—its rarity; its position; femoral rupture in front of the femoral vessels; other varieties of femoral rupture.

The cases in which the rupture sac has been found behind a hydrocele—first noticed by Mr. Thomas Blizard, and subsequently by Sir Astley Cooper and Mr. Henry Cline, and which have since been found more frequent than supposed twenty-five years since—appear to me readily explicable in the same way. A hydrocele exists, a rupture descends till it reaches its upper part, and the disposition to protrusion still continuing, the sac begins to drive down behind the hydrocele, and probably as it lengthens rolls down with it the back of the distended vaginal tunic, which thus forms a second peritoneal covering in front of the rupture. Or a rupture may first exist, and a hydrocele subsequently forming may, as it grows, ascend in front of the rupture sac, and thus the same condition of parts be produced, with the mere difference that the hydrocele ascends before the rupture, instead of the rupture descending behind the hydrocele. The fluid of the hydrocele does not necessarily remain: in Mr. Thomas Blizard's case it was absorbed; but in Mr. Henry Cline's, which I saw operated on, it poured forth when the vaginal tunic was opened.

These are the only kinds of rupture in which a double peritoneal sac can exist. When the adherent neck in a congenital rupture descends vertically into the vaginal tunic, then the double peritoneal sac is complete all round; but when the rupture descends behind a hydrocele, then the peritoneal covering is double in front only, and not behind. In both cases, however, the testicle will be exposed in the course of the operation.

Many swellings of the scrotum, or rather of the parts which it contains, are liable to be c[onfounded] with ruptures, either just after their protru[sion through] the external ring, or when they have d[escended] into the scrotum. The distinction, however, is generally not difficult, often even with a slight examination, and when taken in connection with the previous history of the case, and the constitutional symptoms. Hydrocele of the vaginal tunic of the testicle, although somewhat of the same form, especially if of large size, and as occasionally extending up the spermatic cord to the ring, and even into it, is distinguished by its transparency, by its first appearing at the bottom of the scrotum, and gradually ascending in proportion to its bulk; but I have never seen a single instance, however high a hydrocele might ascend, in which it was not possible to nip the cord between the top of the distended vaginal tunic and the external ring, and so ascertain that it has not any communication with the belly. Of course it undergoes no alteration in size, whether the patient be standing or lying down; neither does it dilate or increase on coughing or any other effort in which the bowels are acted on by the abdominal muscles. One kind of hydrocele, which is, however, far from frequent, is liable to mistake; it is the congenital hydrocele, in which the vaginal tunic not having closed at the internal ring, the fluid contained in it will swell out the hydrocele sac in the erect posture; but, flowing back into the belly when the person lies down, the swelling disappears. But this may be without difficulty distinguished, because, if it were a reducible rupture which returned into the belly on lying down, the fingers placed against the ring would, in most cases, prevent the protrusion of the bowel when the patient stood erect; and consequently there would be no enlargement of the scrotum. But in congenital hydrocele, though pressure were made on the ring, the fluid would ooze through the mouth of the sac into the hydrocele sac, and though not so quickly, yet as certainly at last would distend to its former sizse.

The more rare form of hydrocele, that of the spermatic cord, is more liable to be mistaken for a bubonocele, or inguinal rupture, which has just passed through the external ring. I have seen two or three instances in which this mistake has been made, and an operation thought to be requisite. A curious circumstance with respect to hydrocele of the cord is, that the person sometimes says it has appeared suddenly and after additional exertion. Such was the statement in reference to the last two cases I saw, one of which was under my own care very recently. It would hardly seem possible that it should have been produced at once, or even in course of a few hours, but the patients were positive about it. The appearance of such cases very closely resembles a bubonocele, but, as in common hydrocele, the spermatic cord may always with a little management be grasped above it, and its complete independence of the cavity of the belly ascertained.

Varicocele may be mistaken for rupture, especially if the veins be very much enlarged. Like a rupture, it increases in the upright posture, and mostly disappears on lying down. But if the fingers be placed on the ring, and the patient directed to stand up, the swelling not only reappears, but is of greater size than before, because the pressure, though insufficient to prevent the blood passing through the spermatic artery, is sufficient to prevent its return by the veins, which consequently become largely distended. This quick and increased bulk readily distinguishes varicocele from hydrocele, from which it is still further discerned by the knotty rope-like and general thickness of the whole cord from the testicle upwards, and by its want of transparency.

Thickening of the cord from chronic inflammation, and suppuration in the cord, which last is extremely rare, are said to be capable of mistake with inguinal rupture, and also enlargements of the testicle of any kind are said to be so too; but mistake of either of these conditions can only arise out of great carelessness.

An arrest of the descent of the testicle at the abdominal ring may be mistaken for rupture, but may be distinguished with a little management and tenderness by pressing the finger and thumb upon the cord between the testicle and the ring. Rupture may be complicated with hydrocele, as I have already mentioned; and the rupture sac may either descend only to the top of the hydrocele, as in Prep. No. 1,333 of the College Collection, or even not so low; or it may pass down behind it, as I have shown. I may however observe, that in a person of lax habit, a heavy hydrocele, constantly dragging by its weight upon the cord, would certainly predispose to an oblique rupture, as it would be constantly pulling that part of the cord fascia arising from the inner ring, and thus produce a little hollow, into which, by the ordinary pressure of the abdominal muscles upon the bowels, the peritoneum would be forced, and thus the beginning of a rupture sac be formed.

The absence of all symptoms of strangulation, or of those accompanying peritonitis or enteritis, would prevent in the first instance any mistake as to swellings of the scrotum from ruptures or other causes. But when such symptoms occur, and such swelling of the scrotum also exists, then the attention must be directed to ascertain the true character of the tumour.

Operation for Strangulated Inguinal Rupture.—The necessity for an operation having been decided on, the cut in the skin should be commenced as high as the external abdominal ring, and carried down about two-thirds of the length of the tumour. There is great benefit in commencing the incision high up, because it affords readiness in getting at the stricture, which is mostly situated at or near this point. The superficial fascia and cremaster are to be divided as I have already noticed, and the rupture sac exposed It must not be forgotten, that in old ruptures, though not large, the cremaster often has acquired considerable thickness, and that though sometimes, not unfrequently indeed, the several coverings of the sac may be distinctly made out, even as to the precise number of layers, yet very frequently this is not the case, and the depth between the skin and rupture sac varies considerably. The bluish semitransparent appearance of the sac under favourable circumstances having shown that it is exposed, it should be carefully scratched open with a probe sufficiently to admit a director, and as soon as possible the finger, and then slit up cautiously to the ring, so that the contents of the sac may be exposed and examined. The finger is then introduced to find the seat of stricture, which, according to Sir Astley Cooper's opinion, "will be sometimes found at the abdominal ring," which "is the principal point of strangulation in old and large herniæ; but it is more commonly seated at the internal ring, at the place where the spermatic cord first quits the abdomen." (P 29) He also considers that the mouth of the rupture sac sometimes forms the stricture, as he observes,—"The mouth of the hernial sac, when it becomes the seat of stricture, has been thickened on the inner part by the pressure of the tendons of the internal oblique and transverse muscles." (P. 30.) Dupuytren, however, holds "that in the greater number of cases the neck of the rupture sac is the cause of the mischief; * * * and he thinks he can prove that of nine cases of strangulation, eight depend on the constriction exerted by the neck; and he is not sure that even that is the true proportion." (Vol. I.) How the neck of the sac forms the stricture he explains in the following clear and satisfactory manner:—"This change depends upon the situation of the ring. As the rupture increases in size, the neck of the sac puckers and folds by the weight of the rupture, by the tendency of the displaced peritoneum to return upon itself—a disposition proved by the obliteration of the vaginal tunic in children, the form of omental rupture, thin at the ring and bulky at the bottom of the sac. But the principal cause of this circular groove, of this narrowing of the neck, depends on the application of a truss · the compression it effects on the neck of the sac puckers, contracts, and inflames it as well as the cremaster and cellular tissue; whence results a narrowing and a stricture, if not fibrous, at least which affords great resistance. The neck of the sac may even become cartilaginous." The seat of stricture being ascertained, the finger tip or nail must, if possible, without violence, be entered into the mouth of the sac, and the hernia knife carried in flat upon it till its cutting part may be presumed to have reached the stricture, when it is turned on edge, and by a pumping or sawing motion made to divide it, the finger on which the knife rests being gently pushed onwards till there is sufficient room made to allow it to enter the belly; the knife is then to be laid flat and withdrawn.

The division of the stricture is the most important step of the operation, on account of the possibility of injuring the epigastric artery. The stricture should never be divided inwards or outwards: for if it be divided inwards, and the rupture be oblique, the epigastric artery will be either cut through or wounded, as in Prep. No 1,298 of St. Thomas's Collection, and if the cut be made outwards, and the rupture be direct, then the epigastric artery will be cut through, as happened to Sir Astley Cooper, in the case mentioned by himself, in which he had followed the direction, now long since abandoned, of dividing the stricture outwards. I have said before, that, except in very recent cases, or from dissection, I believe it almost impossible to distinguish between direct and oblique rupture, and, therefore, the stricture should only be divided in such way as will ensure, under the natural and usual course of the epigastric artery, its avoidance. With this intent Sir Astley Cooper laid down as a rule to be invariably followed, the division of the stricture directly upwards—that is to say, towards the front plane of the belly, and this practice is now almost universally and wisely adopted In thus cutting upwards the gut, having been examined and the operator decided as to its healthiness, is first to be returned, and afterwards the omentum, if there be any The edges of the wound are then brought together by two or three stitches, with intermediate strips of plaster to support them, but not to prevent the escape of any serum which may be disposed to exude from the sac, and over the whole a pad of lint is applied.

When the stricture, instead of being situated as usual at or near the external ring, is situated either in the inguinal canal (as in Prep No 1,303 of St. Thomas's Collection), or even at the internal ring (which is more rare), then it is necessary in either case to slit up the tendon of the external oblique muscle to divide the stricture, as it is so deeply situated that it cannot be divided with safety, and sometimes cannot be reached at all, without adopting this proceeding.

Should the stricture not be at or near the mouth of the sac, but be formed by a fibrous band stretching from one side to the other of the sac across the bowel, it must be carefully divided upon the finger or director as may be most convenient. A very good example of this is presented in a preparation, contained in the St Thomas's Collection, from a patient of my own, in which the stricture was formed by a fibrous band as thick as a goosequill

Sometimes the back of the rupture sac bursts and the bowel protrudes into the cellular tissue behind, and there forms for itself a false sac This will, perhaps, at first, cause a little confusion, as if the rupture sac be first opened at its lower part it will appear empty; but when it has been slit up towards the mouth, the bowel will be perceived passing through the back of the sac, and from the cavity in which it is then lodged it may be gently withdrawn; or, if this be difficult, either from the narrowness of the rent or from any adhesions having taken place, the back of the sac must be carefully cut through, and the bowel exposed and dealt with as may appear necessary.

Should the surgeon determine on the division of the stricture external to the sac, as advised by Mr. Key and Mr. Luke, he should proceed according to the following directions given by Mr. Key. "In inguinal hernia the incision may be so conducted as to enable the surgeon to divide the stricture either at the internal or at the external ring. The opening in the skin must be made higher than in the ordinary operation on a bubonocele. The incision should begin at the neck of the tumour, or where it seems to quit the abdomen, and should be continued downwards for about an inch and a half. This will lay bare the lower portion of the external oblique tendon where it forms the ring; a small opening should then be made in the tendon, just above the ring, sufficient to admit the end of the director, which will enable the operator to ascertain if the stricture be at the lower or upper opening. The size of the hernia, and the length of time it has existed, will, in some measure, serve to guide him; but he may immediately decide the point by passing the director downwards under the edge of the external ring, and feeling whether it embraces the tumour firmly or not; or, by making pressure on the swelling below, he may feel if the fluid contents of the tumour can be forced upwards above the ring, so as to distend the sac in the inguinal canal. This point being decided, if the stricture be at the lower ring, he has only to pass his director under its margin, and to divide it to a sufficient extent. If the stricture exists higher up at the neck of the sac, where it will be found in the majority of herniæ of this description, the opening in the tendon should be enlarged for the purpose of passing the director under the deeper stricture. The lower margin of the two muscles will be brought into view, with some of the descending fibres of the cremaster. These may be separated by disturbing the cellular membrane with the end of the director, and the instrument may then be introduced under the transversalis muscle till it reaches the stricture. In the subject, the director when introduced in this manner passes before the transversalis fascia; this will diminish what little risk there may be of wounding the peritoneum, and will carry the knife further from epigastric artery, the tenuity, however, of this fascia will, perhaps, often allow the director to pass beneath it. The instrument should be depressed upon the sac, in order to carry its point under the border of the transversalis, which may be divided to the extent required This operation is more difficult than the division of the stricture in femoral hernia; the principal difficulty lies in the accurate separation of the lower edge of the internal oblique muscle, for the easy passage of the director. The stricture, however, is not so firm in inguinal as in femoral hernia, and the introduction of the director under the transversalis tendon will not be difficult, when it is passed up to the neck of the sac before the attempt is made. The steps of the operation will be much the same in those smaller herniæ which are lodged in the inguinal canal. When the stricture is divided, a greater degree of pressure will be required to return the contents of a large inguinal hernia, on account of the distance from the neck of the sac to the bottom of the tumour, and especially when the omentum forms a part of its contents. In small bubonocele, where the protrusion has scarcely reached the external ring, and accompanied as it commonly is with an imperfect descent of the testicle, the same manner of operating may be followed."

II. Femoral Ruptures

Pass through the femoral ring behind Poupart's ligament, or the crural arch, into the sheath of the femoral vessels, and most commonly are found upon the crease that separates the belly from the thigh.

Femoral Ruptures are of two kinds, *Internal* and *External*, so named in reference to their position in respect of the femoral vessels.

(*a*) Internal Femoral Rupture.—This is by far the most common form of the disease, and, at first, is situated within the femoral sheath between the latter and the femoral vein; but afterwards, as it enlarges, it turns upwards on itself to the crease in the groin.

At the inner side of the funnel-like mouth of the femoral sheath which rests against Gimbernat's ligament, between it and the femoral vein there is a space filled with cellular tissue, which forms the

bed through which the absorbent vessels of the thigh pass into the pelvis. This is, according to Astley Cooper, covered by "a thin fascia which descends on the back of the pubes"; and the same is described by Cloquet as "a membranous partition closing the upper part of the crural sheath, and opposing the formation of crural rupture, as well as the entrance of the finger when pushed from above downwards, above the crural arch. This partition forms above the arch a sort of diaphragm, cellulo-fibrous, whitish, thick, and very resistant in some subjects, simply cellular, weak, and readily yielding, in others." He proposes calling it the crural septum," and describes "its upper abdominal surface as concave; its lower, towards the crural canal, convex (p. 73, 74). Mr. Lawrence, however, says that he has not found, on dissection, either the "thin fascia" or the "crural septum"; in which statement I fully agree, believing this to be nothing more than the cellular bed of the absorbent vessels.

Against this cellular tissue, in internal femoral rupture, the peritoneum bulges down and forms the beginning of the rupture sac, which, as it descends behind Poupart's ligament, is continued with the femoral vein and on its inner side into the sheath, which it speedily distends, and continues descending till it reaches the termination of the saphenous vein into the fermoral vein. In thus passing and increasing in size it becomes apparent, bulging forwards through the large oval opening of the fascia lata at the top of the thigh And thus the rupture sac obtains a covering from the sheath, to which Sir Astley Cooper applied the name "fascia propria"; which, however, seems to me a very inappropriate title, inasmuch as it is not a new formation, as the term would seem to imply, but merely a distention of the original sheath. In a recently-produced, or small, femoral rupture, the sac and its covering from the sheath remain by the side of the vein; but as the rupture increases in bulk, instead of descending lower in the sheath, which is prevented by the termination of the saphenous vein, it protrudes inwards the inside of the top of the sheath just below Poupart's ligament, through which the absorbent vessels enter the sheath, giving it the appearance of a sieve, whence it has been called the cribriform fascia, which, being weakened by these holes, yields more readily than the other parts. As it and the sac continue to enlarge, they generally rise up towards the crease of the groin, where the cellular tissue is most loose, and thus a swelling is formed; the bulk of which is above the point at which it had protruded from the inside of the sheath. When the swelling has attained this size it generally overlaps more or less the femoral vein, and sometimes even crosses in front of it and the femoral artery, as in Prep. No. 1,322 of St. Thomas's Collection. Occasionally, upon the surface of the fascia propria, a gland or two are found which may cause a little difficulty in operating on such a case. An instance of this occurred to me, in which there were two glands connected, probably by their vessels, which resembled a chain-shot, and deeply indented the fascia propria and rupture sac. The fascia propria is covered in front by the general connecting cellular tissue, or fascia superficialis, and the skin; but it never has any covering from the fascia lata, as by some surgeons it is said to have.

It is common to speak of the situation of the epigastric artery in reference to the mouth of the rupture sac, or the part where it first begins to thrust inwards the femoral sheath, and to describe it as on the outer side. But under ordinary circumstances, and with its usual origin, the artery has nothing to do with the sac's mouth, being far away and above it. Only when the epigastric arises low down, and from the femoral artery after it has entered the thigh, can it be fairly spoken of as having any relation to the mouth of the sac, and then it is separated from it by the breadth of the femoral vein.

But there is a disposition of the arteries at the groin which has an important relation to femoral rupture. This happens when the epigastric and obturator arteries are given off from a common short trunk, which may arise either from the external iliac within the pelvis, or from the femoral artery in the top of the sheath. This subject has long since attracted the attention of anatomists, but it has been more carefully inquired into by Cloquet, who says that "when there is a common trunk, the separation of the two arteries usually occurs outwards, sometimes above, rarely below, the upper opening of the crural canal (or sheath). In the first case the obturator artery descends downwards and inwards towards the subpubic (or obturator) hole, and is found entirely on the outside of the upper opening of the crural canal, or even without any relation to it." This I have never seen. "In the second case, the obturator artery descends almost vertically behind this opening, and is found nearer Gimbernat's ligament, in proportion as the common trunk is of greater length. Finally, in the third case, the common trunk dives into the crural canal, or rather arises within it, and the two branches it gives off re-enter the abdomen; the obturator artery, more or less tortuous, mounts on the pubes, and bends back upon its upper edge to descend into the hollow of the pelvis towards the subpubic hole, the epigastric artery turns beneath the crural arch, and runs upwards and inwards towards the rectus muscle. * * * Frequently the obturator artery arises on one side by a trunk common to it and the epigastric, and on the other, from the hypogastric or internal iliac artery. It rarely arises directly from the external iliac." Cloquet has also taken the pains to keep a register of the comparative number of subjects in which the obturator arose from the internal iliac, from the external iliac, and from the epigastric arteries. And from examination of two hundred and fifty cases, half of which were men, and the other half women, he obtained the following results:—

From the internal iliac artery on both sides ....in 160 subjects	87 men 73 women
From the epigastric in 56 "	21 men 35 women
From the internal iliac on one, and the epigastric on the other, side, in 28 subjects	15 men 13 women
From the femo[ral] in 6 "	2 men 4 women
Total 250	250

In another calculation, from 500 subjects, he found that the obturator artery arose—

From the internal iliac artery ....in 348 cases	191 men 157 women
From the epigastric or crural artery ...in 152 cases	58 men 94 women
Total 500	500

Whence it appears—First, that the instances of the obturator arising from the internal iliac are the most numerous; that they are to those from the epigastric or crural artery nearly as three to one. Secondly, that the obturator artery appears to arise rather more frequently from the internal iliac in man than in woman, though the excess in the latter is not great. (P. 71—73)

Of the three directions which Cloquet speaks of as being taken by the obturator artery, when it arises either in common with the epigastric or from the femoral artery, I have never seen but that in which the common trunk inclines inwards above Poupart's ligament, and the obturator artery descends from it along the edge of Gimbernat's ligament to the back of the obturator hole; and consequently, if a femoral rupture exist, it must pass around the mouth of the rupture sac close to Poupart's ligament, as in Prep. No. 1,348 of the College Collection; and this is the situation in which, thus arising, the obturator artery is almost invariably found.

My friend Mr. Dixon has, however, met in the dissecting-room with another very remarkable variety—a common trunk from the external iliac giving off three branches, an upper one taking the course of the epigastric artery upwards and inwards, and two below, the hinder and smaller of which descends behind the pubic bone, taking the usual course of the obturator when arising from the epigastric, whilst the front and larger one passes downwards and forwards behind the inner part of the crural arch, and dips down before the pubic bone to the external obturator muscle; so that in this case, did a femoral rupture exist, not only would its neck be surrounded on the inside by the hinder obturator artery, but its front would be crossed by the front obturator.

The College Museum also possesses a very curious prep., No. 1,347, in which, though the epigastric arises from the external iliac, and the obturator from the internal iliac artery, yet the two are connected by an anastomosing branch which runs around the inner edge of the femoral ring. Could this have been like to the case mentioned by Mr. Key, in which, in operating on a femoral rupture, "a small branch given off from the obturator artery crossed the fore part of the neck of the sac, and was cut through in dividing the stricture: the obturator artery itself, which arose from the epigastric, passing into the pelvis behind the neck of the tumour?" (P. 67).

Now, although, by Cloquet's comparison, it appears that the obturator artery is given off from the external iliac three times as frequently as from the epigastric or crural artery, it is very remarkable that, so far at least as I am aware, no instance is recorded in which that vessel has been wounded in dividing the stricture of a femoral rupture, though its frequent situation about the mouth of the sac would seem to make this unavoidable. Sir Astley Cooper indeed says, "that in all the (six) cases, which he himself had dissected, where this variety existed with crural hernia, the obturator passed into the pelvis on the outer side of the neck of the sac, entirely out of the reach of any danger from the knife." He, however, mentions three cases in which the obturator artery ran over the mouth of the sac, and descended into the pelvis on the inner or pubic side. In a College Preparation, and the Prep. No. 1,286 of St. Thomas's Museum, the artery descends on the inner side of the sac's mouth. Three cases are mentioned by Monro *primus*, one by Mr. Allan Burns, one by Scarpa, and another by Breschet, in all of which the obturator artery was on the pubic side of the mouth of the sac; and Mr. Lawrence mentions that "there are two specimens of double femoral hernia in the Museum at St. Bartholomew's Hospital, with the obturator artery arising from the epigastric on each side. The former vessel runs on the outer side of the neck of the sac in one of these four ruptures, and on the inner side in the other three."—(Page 509). Some other and still more satisfactory reason for the escape of the obturator, in the operation for strangulated femoral rupture, must therefore be sought, than that given by Sir Astley Cooper—to wit, the passage of the artery behind the neck of the sac instead of before it, as in the cases just mentioned it was so met with in eleven cases, while Sir Astley's own instances amounted only to six.

The spermatic artery is also spoken of in connection with femoral rupture; [but it] lies away to the inside, and cannot be inju[red in the] operation, as appears to me, without making [a] division of the stricture to an unnecessary and, therefore, unwarrantable extent. An instance, however, of its division, followed by the death of the patient an hour after the operation, which had not been attended with unusual bleeding, occurred to Arnaud; and examination a large quantity of blood was found in the belly. If, however, an oblique inguinal rupture have long existed, the spermatic vessels, before quitting the belly, not the cord afterwa[rds], may be so dragged out of place as to lie close to the inside of the mouth of a crural rupture, as shown in a case described by Cloquet (page 82, pl. vii., f. 4, 5). According to our mode of dividing the stricture directly upwards, these vessels would not be injured; but in the same preparation the epigastric artery has been also displaced by the inguinal rupture; and, running immediately across the neck of the femoral rupture, its division could scarcely be avoided. Probably, when inguinal and femoral rupture exist on the same side, this disposition of the spermatic and epigastric vessels must exist, although it has not been noticed except by Cloquet.

Other swellings about the groin, and in or near the seat of a femoral rupture, may be mistaken for that disease. The neck of the rupture sac may have been closed, probably by the use of a truss,

and its communication cut off from the belly, as in Prep. No. 1,280 of the College Collection; and if, as Cloquet mentions, it contains serum its confusion with an actual rupture is not remarkable. In the museum at St. Thomas's there is, however, a preparation of a serous cyst as big as a pigeon's egg, occupying the place of a femoral rupture, but which has no appearance of having been a rupture sac. Sometimes an absorbent gland, the existence of which among the coverings of femoral rupture is by no means unfrequent, becomes considerably enlarged, and may be mistaken for rupture, as it suffers a slight impulse from coughing. And this will occasionally go on to suppuration, and be attended with nausea, stercoraceous vomiting, hiccough, and costiveness; a case of this kind occurred to Mr. Macilwain, who, considering it a doubtful case, cut into it cautiously, and found suppuration to have begun in the centre of the swelling: the patient did well. (Page 308.)

Psoas abscess may be mistaken for femorla rupture, as it distinctly increases on coughing; but it is not materially altered in size by change of position; and the pain in the back with which the disease has commenced, and which, more or less, constantly accompanies it, will distinguish it from rupture.

On the other hand, femoral ruptures may be mistaken for buboes, and though, probably, there are now "few persons so prejudiced as to decide that a swelling in the groin, if in a young person, is bubo, and, if in an old one, a rupture," and he give ground to Petit's arch observation, that though "he quite agrees with them that it is more common for old people to have ruptures, and young folks buboes, yet that it is very possible that the contrary may happen, and that the point is then not as to the age, but as to the disease itself" (p. 258). Yet such mistakes do occur, and ruptures have been opened to the great dismay and surprise of the medical attendant, and certainly with much less dangerous results, as the cases mentioned by Petit and others prove, than when such swelling has been poulticed for some days, under the notion of encouraging them to suppurate, and their true nature only discovered when the case has been put under the care of some more able and experienced surgeon, and the operation for strangulation, when performed, found to be too late, as in the instances mentioned by Sir Astley Cooper, in which, after poulticing for three days a supposed venereal bubo, the operation was performed, and a mortified gut found.

Serous cysts are sometimes found upon the rupture sac, an instance of which occurred to me some time since. On cutting into it, fluid escaped, and I supposed I had opened the rupture sac and exposed the bowel; but it remained so extremely immoveable that I began to doubt, and further examination showed the sac unopened. I therefore proceeded with the operation; about a teaspoonful of fluid escaped, and the operation was finished under the ordinary circumstances. Mr. Samuel Cooper also cut into several cysts in operating on a case of femoral rupture; and the same fact has been noticed by Sir Charles Bell.

Sir Astley Cooper mentions an example of enlargement of the femoral vein immediately below Poupart's ligament, and projecting through the oval hole in the fascia lata, which dilating when the patient coughed, by the pressure of the bowels upon the iliac vein, had great resemblance to a femoral rupture. At present there is in St. Thomas's Hospital a case of this kind, in which the swelling of the vein just below the crease of the groin has precisely the same form as a small femoral rupture; but it has a bluish tinge from the transparency of the skin, and yields to slight pressure more readily than a rupture.

Sir Astley Cooper observes that a femoral rupture sometimes, "instead of crossing the thigh in the direction of the crural arch, extends downwards along the edge of the crural vein and the *saphena major vein* (p. 1). The tumour does not quit the sheath for the femoral vessels. (He should rather have said, does not protrude it inwards, for under ordinary circumstances it does not leave, but only protrudes, the sheath inwards and upwards.) The appearance of this disease is that of a general swelling of the fascia on the inner side of the femoral vein, but without its producing any circumscribed tumour. The part swells whenever the patient coughs or uses any considerable exertion; but the swelling diminishes, though it does not entirely subside, when he stands at rest. * * * He believes it to be not an unfrequent variety, as he had met with it three times in the dead body, and it existed on both sides in each" (p. 25). Mr. Callaway tells me that one such case was under his care, which had been presumed to be a varix of the femoral vein; but was controlled by the use of a truss. Besides these, however, I know of no other cases, and therefore do not think it so frequent as Sir Astley Cooper would seem to infer.

Internal femoral rupture is sometimes confused with inguinal rupture. It appears to me that this can only depend on ignorance or carelessness. The situation of inguinal rupture, immediately after it has left the inguinal canal, to the inner side of the spine of the pubic bone and the outer column of the ring, and that of femoral to the outer side of the same parts, is always sufficiently apparent to prevent mistake. And, indeed, when inguinal rupture is in the inguinal canal—which is the only period it can have anything like resemblance, as to position, with femoral—it may always be readily distinguished by the crease of the groin remaining distinct, and by the oval form of the swelling, which, like the canal, has an oblique course. Whilst in femoral rupture the crease of the groin is interrupted and, indeed, destroyed by the rounded swelling, which is situated partly in the thigh and partly on the belly, and will not unfrequently permit the fingers to be got in behind it, between itself and the tendon of the oblique muscle, which shows that the protrusion is not above the crural arch.

In rare instances there are more than one femoral rupture, a remarkable instance of which is seen in one of the preparations of the College Collection.

Sometimes femoral and inguinal rupture exist at the same time and on the same side. In the Museum of St. Bartholomew's Hospital there is an example of oblique inguinal and femoral rupture on each side; and Mr. Teale mentions a similar case recently in the Leeds Infirmary.

(*b*) EXTERNAL FEMORAL RUPTURE.—In very rare cases the peritoneum is protruded behind the crural arch into the top of the funnel of the crural sheath on its outer part, between itself and the femoral artery, and thrusts before it the sheath. It appears between the femoral vessels and the upper front spine of the hip-bone, forming a moderately-raised swelling, which, becoming narrower below, ascends obliquely inwards, and terminates with a blunt point in the region of the little trochanter. On the outer side it has the m. rectus and vastus externus, and upon or before it the sartorius muscle and part of the fascia lata. The neck of the sac, which is its widest part, has for its inner wall the iliac fascia, and for its outer wall the iliacus internus and psoas magnus muscles. I cannot very well make out from the description given by Hesselbach, who was the discoverer of this form, whether he thinks the rupture sac fairly enters the outer part of the sheath, or whether it protrudes the iliac fascia nearer to the iliac attachment of Poupart's ligament; but I cannot conceive there is room for it to do other than descend fairly into the top of the sheath and thrust it down.

Femoral rupture is also said to descend in front of the femoral artery and vein, and have the epigastric artery on the inside of its neck. Cases of this kind have been seen by Hesselbach, Cloquet, and two instances by Mr. Stanley. Cloquet also speaks of a femoral rupture passing through a hole behind the vessels, and separated from them by the deep layer of the fascia lata.

Varieties in femoral rupture, when in its usual situation, sometimes occur. Sir Astley Cooper mentions three varieties: first, that in which "the fascia usually covering the hernial sac has given way, so as to allow a portion of the tumour to pass before it, thus dividing the tumour into two parts, with a sort of hour-glass contraction between them." (P. 25.) Second, "when the sheath for the crural vessels." in which the hernia is formed in part within its sheath, and also in the common way." (P. 25.)

I have had three cases which do not seem to resemble either of the varieties described: in two of these the rupture sac had probably given way on the outer side, and there remained only a covering of skin; the third (the preparation of which is in the St. Thomas's Collection) seems to be a very similar case, only the rupture sac was not so lengthy outwards as in the first case. In my third case the sac had probably given way on the inner side.

A Course of Lectures on Practical Midwifery.

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In my last lecture, gentlemen, I described to you the differences between the male and female pelves, and explained the effects which those differences must produce on the process of labour. I also gave you an historical summary of the progress which has been made in understanding the mechanism of parturition; and you will recollect I told you that the true account of the child's position was given by two writers at the same time, and apparently without the least knowledge or connection with each other. Saxtorph and Solayres de Renhac both described the most common position of the child as being that in which the sagittal suture corresponds to the right oblique diameter of the pelvis, the posterior fontanelle being directed forwards and to the left.

I now am going to describe the different positions of the head; and first of all I think I had better mention them to you as they have been described in the various works of midwifery; I shall afterwards describe the simple manner in which they really occur in nature.

The German writers on midwifery have described four positions of the head; the French and English authors, six. Two of these have been very properly omitted by the German school of midwifery as not occurring in nature.

It is, gentlemen, allowed on all hands that the position of the child in which the head occupies the right oblique diameter of the pelvis, the posterior fontanelle being turned forwards and to the left, is the most common. This has, therefore, been described by all authors as *the first position of the head*.

In *the second position* of the head the sagittal suture occupies the left oblique diameter, the posterior fontanelle being turned forwards and to the right.

In *the third position* of the German school the reverse of the first takes place; that is to say, the sagittal suture still occupies the right oblique diameter, but the anterior fontanelle is turned forwards and to the left, instead of the posterior.

The *fourth position* is the reverse of the *second*; the sagittal suture still occupying the left oblique diameter, the anterior fontanelle being turned forwards and to the right.

These positions, as established by the German school, are much more simple and correct than the six positions established by Baudelocque, and followed by the French and English schools. Baudelocque described four positions, such as I have just mentioned to you, and added two others: one, his third position of the head, was where the sagittal suture corresponded with the antero-posterior diameter of the pelvis, the posterior fontanelle being directed forwards towards the symphysis pubis; the other, his sixth position, was the reverse of this, the anterior fontanelle being directed to the symphysis pubis. These two positions the German teachers have very properly rejected, as they are purely hypothetical, and do not exist in nature. The correct presentation of the child's head (the *situs capitis rectus atque aequus*) was formerly sup-

posed to be with its long axis corresponding to the transverse diameter of the pelvis; and the old writers on midwifery all state that it is necessary for the head to make a turn while entering the cavity of the pelvis, so that the face shall get into the hollow of the sacrum (its long diameter being parallel to the antero-posterior one of the pelvis), when the face, sliding down the inclined plane offered to it by the sacrum, sacro-ischiatic ligaments, and coccyx, is forced to pass with the occiput forwards under the pubic arch.

I have now, gentlemen, enumerated the positions of the head as they are described by authors of the three great schools. I shall next proceed to explain them to you as they really occur in nature. To discover the position of the child's head, gentlemen, is one of the most difficult points in practical midwifery, and this has, perhaps, been the cause of so many complicated presentations being described, authors have found it much easier to calculate the position in which the head *ought*, in their opinion, to pass, than to observe what really takes place in nature. To form an accurate diagnosis respecting the presentation requires a considerable degree of what has not inaptly been called the *tactus eruditus*, which can only be acquired by lengthened experience added to careful observation.

At the commencement of labour the os uteri is found high up in the hollow of the sacrum, directed backwards, as I believe I have before told you; it, therefore, as Baudelocque asserted, the vertex of the head presents, the sagittal suture should be the lowest part of the cranium, and the one which the finger would first touch on in making an examination. This is not the case, however, as Smellie first observed. When at the commencement of labour the os uteri is enough dilated to admit the finger, it is felt in this presentation to be crossed by the sagittal suture, which divides it unequally; the vertex, therefore, gentlemen, *never presents*, the sagittal suture, crossing the os uteri, which, remember, I have just told you is directed to the hollow of the sacrum, is also turned in the same direction. The perpendicular diameter of the head is therefore parallel to the axis of the brim of the pelvis, which corresponds with a line drawn from the centre of the brim of the pelvis through the umbilicus of the mother. The right side of the head, or the right parietal protuberance, is therefore the part first touched by the finger in the most common position of the head, being the part which is lowest or deepest in the pelvis at the commencement of labour. We may therefore say, that *in the first position the direction of the head at the beginning of labour is with the sagittal suture crossing the os uteri, and the right parietal protuberance placed lowest in the pelvis*. So far from the posterior fontanelle being invariably the lowest, the anterior is often felt quite as low, and sometimes lower than the posterior, without in any way rendering the labour less favourable.

As the head enters the cavity of the pelvis, it does not turn, as has been stated by writers on midwifery, into the hollow of the sacrum, with its long diameter in the antero-posterior diameter of the pelvis; but it still retains the oblique position and even when fairly in the cavity of the pelvis it remains placed obliquely, the sagittal suture corresponding with the right oblique diameter of the pelvis, the posterior fontanelle turned to the left foramen ovale. Neither does the head pass under the pubic arch with the occiput forwards, as it has been stated to do, but it is the posterior and superior quarter of the right parietal bone which first enters the vagina, and which first passes beneath the pubic arch. It is the right branch of the lambdoidal suture which at this moment will be felt parallel to the left descending ramus of the os pubis. After all, the process is nothing more than this—the head enters the pelvis *obliquely*, it passes through *obliquely*, and it comes out *obliquely*.

I will now point out to you two or three circumstances occurring during labour which prove the correctness of this view of the manner in which the child's head passes through the pelvis. If the head be pressing firmly on the os uteri at the commencement of labour—if there be but little liquor amnii present, or if the membranes have been ruptured early and the liquor amnii has escaped—a puffy œdematous swelling forms on that part of the scalp which corresponds to the os uteri; if the head should be expelled suddenly, the swelling will be found situated upon the sagittal suture. This swelling, you will remember, I have before described to you; there is no term for it in English, so it has been called the caput succedaneum, and you know that it is caused by the pressure at first of the os uteri, and afterwards of the vagina obstructing the return of blood through the veins of the scalp. This swelling, therefore, must be formed on the part which is encircled by the os, and therefore in the first part of labour it is found on each side of the sagittal suture. As the os uteri dilates, and the head gradually descends and alters its position, this swelling disappears in part and now forms over the posterior and superior quarter of the right parietal bone, or that portion which first enters the vagina. Now, gentlemen, if the vertex presented, where would this swelling be situated? Over the occipital fontanelle; but this is never the case. If the head presented with the sagittal suture in a line with the antero-posterior diameter of the pelvis, it would also be in a line with os externum. This is *not* the case, for in passing through the os externum the sagittal suture crosses the left labium obliquely at an acute angle. When the head is expelled the face does *not* turn directly to the right thigh of the mother, as it ought to do if the shoulders were passing through the pelvis with their long axis in its antero-posterior diameter, but it turns obliquely backwards, with the face looking towards the posterior part of the mother's right thigh, as, of course, the shoulders take the other oblique diameter.

I therefore repeat to you, gentlemen, that the head enters the brim of the pelvis *obliquely*, passes through the cavity of the pelvis *obliquely*, and makes its exit from the inferior aperture of the pelvis *obliquely*.

The *second position* is exactly the opposite of the first, the sagittal suture being parallel to the left oblique diameter of the pelvis, and the posterior fontanelle corresponding to the right foramen ovale. This position has been stated by some to occur almost as frequently as the first, and Professor Von Siebold, of Berlin, remarked, that in nearly all the labours which occurred during two months at the lying-in hospital to which he was attached, the head presented in this position. In this position the head is stated by the works on midwifery to pass through the pelvis as in the former case, that is, the head on entering the cavity of the pelvis turns with the sagittal suture into the antero-posterior diameter of the pelvis, the face into the hollow of the sacrum, and when the head passes through the inferior aperture of the pelvis it comes with the occiput foremost under the pubic arch.

In the third position, where the long diameter of the head is in the right oblique diameter of the pelvis, the anterior fontanelle turned forwards and to the left, the occipital fontanelle to the right sacro-iliac synchondrosis, it is stated to enter the pelvic cavity much in the same way as in the first and second positions, viz., it gradually turns with the sagittal suture into the antero-posterior diameter, the occiput now occupying the hollow of the sacrum, as the face did in the two other positions, the forehead directed forwards towards the symphysis pubis, but, being too broad and too flat to pass under the pubic arch, it is forced upwards behind the symphysis pubis by the continued action of the uterus, while the occiput, in the hollow of the sacrum, descends and passes foremost over the perineum, which it distends enormously.

Now all this, gentlemen, by no means agrees with what we find in nature, as Professor Naegele very truly said in his lectures sixteen or seventeen years ago, "One author has imagined it, and the others have copied it from him. According to them the third position of the vertex should be of by far less frequent occurrence than the second. I have" (says he, MS lectures) "observed as many labours as any accoucheur in Germany, and from my observations, which I have made for many years with the greatest possible attention and care, the third position after the first is by far the most frequent in occurrence of all the head presentations. On the other hand, the second position of the head, which has been supposed to be so frequent, occurs as an *original* presentation very rarely."

"The manner in which the head," says Professor Naegele, "when in the third-vertex position, is directed during labour and moves through the pelvic cavity, is according to my observations as follows.—At the beginning of the second period of labour, and in those who have borne children even earlier, the great or anterior fontanelle is felt directed towards the left foramen ovale, and the smaller or posterior one to the right sacro-iliac synchondrosis nearly at an equal height—sometimes one, sometimes the other, being reached with greater facility. As the right parietal eminence in the first position of the head is the most depending part, so in this case it is the left. When the point of the finger is brought in contact with the head in the direction of the central line of the pelvic cavity, it touches the protuberance of this bone. As the head enters and passes through the superior aperture of the pelvis, the anterior fontanelle corresponds always to the left foramen ovale, as the posterior one does in the first position; and as soon as the head has engaged in the cavity of the pelvis, the posterior or great fontanelle turns towards the ascending ramus of the left os ischium, and both can be felt at an equal height as to each other.

"As soon as the head experiences the resistance which the inferior part of the pelvic cavity opposes to it,—or in other words, the oblique surface which is formed by the lower end of the sacrum, the os coccyx, the ischiatic ligaments, &c., by which it is compelled to move from its position backwards into a direction forwards,—it turns by degrees with its great diameter into the left oblique diameter of the pelvic cavity, viz., the posterior fontanelle is directed to the right foramen ovale; and, as the head approaches nearer to the inferior aperture, it it is the posterior and superior quarter of the left parietal bone which is felt in the pelvic cavity opposite to the pubic arch, so that, when the finger is introduced under and almost perpendicular to the symphysis pubis, it touches nearly the middle of the posterior and superior quarter of the left parietal bone. This is precisely the part which, as the head advances further, first distends the labia, and with which the head first enters the external passage, it is also the spot on which the swelling of the integuments appears. As in the case of the first position of the head the posterior fontanelle is usually directed to the left when the head passes the external passages, so in this case it is mostly directed to the right."

"In primiparæ, gentlemen, this change takes place slowly, and requires many pains before it is completed. When the pain begins, the posterior fontanelle, which had previously been backwards and to the right, comes forwards and is more within reach, the anterior fontanelle, which had previously been forwards and to the left, at the same time retreating, so that for a moment the head will lie in the transverse diameter of the pelvis. As the pains recur this slight twist is repeated, so that at length and by degrees the head passes not only into the transverse diameter of the pelvis from the right oblique, but from the transverse into the left oblique. The third presentation of the German school is, therefore, converted into the second, in which position the child is born. In multiparæ this change is frequently effected during a single pain.

"In the former part of my practice," says Professor Naegele, "not knowing that the head made this turn, I always concluded that my examinations during the early part of labour had been incorrect. I was very uneasy that I did not find it all exactly as the books described, and I attributed my want of success in ascertaining the position to my own awkwardness. At length, in a private case in which I was much interested, I again felt what I thought was the anterior fontanelle towards the left foramen ovale, and, circumstances occurring which rendered it necessary to apply the forceps and terminate the labour, I found that the head had been actually in the position which I imagined I had felt. Since this time

I have in many cases sat by the bedside with the finger on the head during the whole labour, and I have thus arrived at the truth."

You will recollect, I said that we are told in books on midwifery, that, as in their third presentation the head descends through the cavity of the pelvis, the forehead turns directly forwards until the sagittal suture corresponds to the antero-posterior diameter of the pelvis, the occiput being in the hollow of the sacrum; but that, as the forehead is too broad and flat to pass under the arch of the pubes, it is by degrees forced, by the continued action of the pains, up behind the symphysis pubis, the occiput descending and pressing against the perineum, which it must distend enormously; the forehead is said also to remain behind the pubic symphysis until the occiput is born. Whether such a thing be possible, gentlemen, I leave for you to consider.

These blunders have been perpetuated, gentlemen, from one generation to another; one author has served as a copy for all the rest, and students naturally find, when attending cases of midwifery, what they are told to expect, or, if they do not find what they expect, they naturally attribute their not finding what they are told must be there to their own want of skill.

The very circumstance of the head passing from the third into the second position is quite sufficient to puzzle and mislead. You feel sure you have felt the head, with the anterior fontanelle forwards and to the left at the beginning of labour; and yet when the child is born the occiput is distinctly forwards and to the left; you therefore conclude that your first examination was wrong.

Moreover, it is exceedingly difficult to distinguish always correctly between the two fontanelles, it seems easy enough when you look at them, the one is large and quadrangular, the other is small and triangular, but when the head is much compressed and the bones beginning to overlap, the fontanelles become greatly altered both in form and size, and if from the distance of the head the finger can only just reach it, it becomes very difficult to decide. In such cases if you feel a suture running backwards this must be the coronal suture, and therefore it is the anterior fontanelle; but if no suture is felt running backwards, you may be pretty sure that it is the posterior fontanelle.

The fourth position of the head of the German school was said by authors to follow the course of the third, which I have just described to you, the occiput being made to sweep down and distend the perineum, as was said to occur in the third position. You know I told you at the commencement of the lecture, that in the fourth position it corresponds to the left instead of the right oblique diameter, the anterior fontanelle being opposite to the right foramen ovale, and the posterior fontanelle to the left sacro-iliac synchondrosis. For the child to be born in this position, you know the same difficulties would present themselves as are stated to do in the third position, and the perineum must be just as much distended by the occiput as in it.

"Out of a hundred labours where the head presented," says Prof. Naegele, "which I carefully observed from the very first commencement of the pains till their termination, the third position of the vertex occurred twenty-nine times. Of thirty-six labours which occurred at the infirmary of this place from the beginning of 1821 till the February of the same year, I counted twenty-two with the vertex in the first position, eleven with it in the third; two presentations of the nates, and one of the face. According, however, to the observations I have hitherto made, the proportion of the third vertex position to the first, with respect to the frequency of their occurrence, is as about one to two-and-a-half. During the time that I saw ninety-six cases of the third-vertex position the fourth occurred only twice; and of more than 1,200 cases, which I carefully observed and noted with particular accuracy, I did not find a single instance of the head being originally in the second position. From the observations that I have made," the Professor continues, "I am thoroughly convinced that in cases of the third and fourth positions of the head or vertex, in the more advanced state of labour, the occiput is not usually turned into the hollow of the sacrum; but that in cases of the third position of the vertex, when the labour has advanced considerably, the posterior fontanelle is turned from the vicinity of the right sacro-iliac synchondrosis to the right foramen ovale; and in the fourth position from the left sacro-iliac synchondrosis to the left foramen ovale, and in this manner it clears the external passages; that this change of the third position into the second, and of the fourth into the first, requires no peculiarly favourable circumstances, and that these species of labours can be completed under the usual proportions of the active and passive momenta which relate to the mechanism of childbirth, by the natural means in the same time, with the same expense of strength without greater difficulty &c., than that species of labour where the head takes the first and most common position."

There are, then, gentlemen, only two positions in which the cranium presents in reality, each of them is oblique; in one the right side of the head is foremost, or lowest, in the pelvis; in the other, the left side. The former of these, from its greater frequency, is called the first position of the cranium, the latter we ought to call the second position of the cranium. In England and France these presentations have been called vertex presentations; in Germany, *hinterhaupt*, or *hinderhead*, presentations. Neither expression is strictly correct, as neither the vertex nor the occiput presents, but the posterior and superior quarter of the parietal bone of the corresponding side. It is a curious fact, that in some of the works on midwifery, positions of the parietal bones have been described and commented on as being particularly dangerous and difficult cases. These presentations, gentlemen, ought in strictness to be called parietal, as, if this were the case, the name would indicate the presentation, instead of deceiving as it now does.

I now come to speak to you of the presentations of the face; but as the hour is nearly expired I shall not be able to enter fully on these in the present lecture, so I shall content myself with merely giving you a general view of them at present, and explain them more fully at our next meeting.

Well, then, gentlemen, the face is described by German writers as presenting in four positions analogous to those of the head; and by French authors six positions are said to occur, the two additional ones having been added by Baudelocque, to correspond with his two additional positions of the head. In the first position of the face, according to the German school, the chin corresponds to the left acetabulum, the forehead corresponding to the right sacro-iliac synchondrosis. In the second position the chin is opposite to the right acetabulum, and the forehead to the left sacro-iliac synchondrosis. The third and fourth positions are thus reversed, as before described of the head; and in Baudelocque's additional two, the face is said to occupy the antero-posterior diameter of the pelvis. I shall at my next lecture, gentlemen, resume this subject.

We understand that Dr. Sandys, of Birmingham, has removed to Daventry, to succeed to the practice of the late Dr. Lee of that place, whose death was noticed in our columns some weeks back. From what we know of Dr. Sandys, we feel assured that he will prove a valuable acquisition to the town of Daventry and its neighbourhood.

The Burgomaster of Liege has published the following decree, bearing date the 1st of August.—"The burgomaster, having been informed that the druggists and other shopkeepers are in the habit of selling an arsenical paper to the public for the purpose of killing flies, and believing that this preparation may give rise to fatal accidents, as well as facilitate intentional poisoning, by the advice of the medical commission, and in virtue of Article 15 of the law of March 12, 1818, informs all druggists and others that the sale of such paper cannot take place without a special permission obtained from a local authority, and that those who do not obey this order will be prosecuted according to Article 22 of above-mentioned law."

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XXIII.

URTICARIA.

According to Willan and others.

GENUS.	SPECIES.
Urticaria.	U. Febrilis.
	U. Evanida.
	U. Perstans.
	U. Conferta.
	U. Subcutanea.
	U. Tuberosa.

As proposed by Startin.

GENUS AND SPECIES.	DIVISIONS.	FORMS.
URTICARIA.	Localis.	Sparsa.
U. Simplex.		Conferta.
U. Tuberosa.	Generalis.	Acuta.
		Chronica.

GENTLEMEN,—Our subject for to-day (*Urticaria*), placed by Willan amongst the Rashes (the exanthemata, as he entitled them), has been long known to medical writers and to non-professional persons as the Nettle Rash.

By many authors urticaria has been regarded as an eruptive fever, probably from the above-mentioned classification of it with measles and scarlet fever, but Willan had no intention to promulgate such an error, as he was guided only by the external marks of diseases in his arrangement; otherwise, scabies might be regarded as partaking of the nature of smallpox, because the two maladies are in juxtaposition in the same author's order of pustules—an occurrence on which I have heretofore expressed an opinion I think it unnecessary now to repeat, for I trust it will be obvious, not only from the recapitulation you heard last week, but also from all my former remarks, that identity of nature and practical utility have alone furnished foundations for any attempt at classification you may have perceived in these lectures; all other arrangements I have long since been convinced lead to no certain practical result.

Some years ago I had nearly completed a manual on skin diseases, with the divisions of the subject founded on the real or supposed situations of the various affections in the anatomical structure of the skin; an accident deprived me of my labours, and I am now more than ever convinced that they were not calculated to advance either the understanding or the treatment and cure of these multiform disorders. Since that time, however, the same views have actuated others, and the result is before the public, to whose better judgment I leave the merits or demerits of the undertaking, and return to the subject claiming for the moment my undivided consideration.

The nettle-rash, as you all know, has obtained its popular appellation from the close and complete resemblance it bears to the effects of urtication or stinging with nettles on the human skin. I may observe, however, that this stinging must be carried to an extraordinary degree of severity to produce such examples as those you witness on some of the models, which, however, do not illustrate the most common forms of the complaint. In addition to this identity of appearance, a similarity of sensation is an accompaniment of urticaria, which may be thus defined —A non-contagious eruptive inflammation on the surface of the body, consisting of flattened, slightly prominent, livid, or light red patches, palest in their centres, of variable size, from that of a pea to that of the palm of the hand; appearing insulated or in groups on an otherwise smooth and healthy skin, and being for the most part of an evanescent or fugitive nature, though sometimes becoming chronic, occurring in paroxysms, and often attended by constitutional or gastric disturbance, with pain, itching, and tingling of the parts affected, like the stinging of nettles, the visible effects of which on the skin are very exactly represented by the disease. This affection, observed and described in medical works since the days of Hippocrates, may attack at any period of life; nor do the rich appear to be more exempt from it than the poor; indeed the luxu-

rious habits of the former, added to a certain irritable state of the constitution, particularly amongst individuals of the gentler sex, would appear to be predisposing causes:—still I think I have observed that the disease assumes a more severe form in males than females. The spring, summer, and autumnal seasons seem most favourable to its appearance; and it is commonly produced in its simple and acute forms by eating certain articles of food which, in habits predisposed to this complaint, very constantly excite the eruption. Several substances have a peculiar influence in this respect. muscles and other shellfish, mushrooms, rancid oils or butter, honey, balsam of copaiba, &c.; but their effect is very constantly to be attributed to the idiosyncrasy of the individual, rather than to the poisonous nature of the aliment, as others partaking of the selfsame article have experienced no such deleterious effects. It is also remarkable that external irritation of the skin will produce urticaria in these predisposed individuals, so that we find it complicated with other cutaneous diseases with which such parties may happen to be afflicted: thus, I believe, I have seen every cutaneous disease attended with much pruritus as a symptom, occasionally give rise to urticaria; whilst frictions, the stings of ants or mosquitos, the hairs of dolichos pruriens (cowhage), and other such like agents, have the same effect. I have often been able, *a priori*, to distinguish those skins which would be thus influenced; they are generally blonds, and with much apparent vascularity in the capillaries, which terminate visibly on the surface in minute arboriform ramifications, whilst the integument, when pinched up, appears rather thickened, and to possess less than its usual elasticity. It is not uncommon in these instances to witness the production of urticaria from the slightest friction, or from the pressure of the clothes, the complaint manifesting itself in stripes or bands of various figures, rather than in more or less circular patches; on the disappearance of these marks, a stain resembling a slight bruise is not unfrequently observable on the skin.

Willan divided urticaria into six species, which he named *U. febrilis*, *U. evanida*, *U. perstans*, *U. conferta*, *U. subcutanea*, and *U. tuberosa*. By the chart, to which I have had occasion to refer so frequently, you will perceive the arrangement under which I propose bringing this malady to your notice: which is an endeavour to render the subject at once [illegible] simple and precise; thus I have divided the affection into two species, two divisions, and four forms or varieties, which I intend, from the mere mention of their names, should describe the nature, form, and extent of the disease. The species are *U. simplex* and *U. tuberosa*; the divisions, *localis* and *generalis*; and the forms, *sparsa*, *conferta*, *acuta*, and *chronica*.

Urticaria simplex appears in irregular patches of a more or less circular figure, either after a slight febrile attack, or more commonly from the ingestion of some particular kind of food or medicine, which occasions the appearance of nettle-rash in certain idiosyncrasies. The eruption is first manifested by a red patch or efflorescence, in the midst of which the slightly-raised wheal becomes apparent, and vanishes or removes its situation after a short period, which is rarely prolonged beyond an hour or two in the acute form of the affection. Considerable tingling and itching accompany this rash, which is apt to recur towards the evening and during the night, when the frictions to which the patients subject the parts give rise to a degree of tumefaction and hardness which for the time produce much disfigurement and enlargement of that portion of the body or limb affected. In the face this is most remarkably apparent, the eyelids and features being sometimes scarcely distinguishable. This eruption appears to relieve or carry off the internal disorder, which, with the rash, commonly disappears in a week or ten days, leaving little or no trace of their existence: unless the malady assume the chronic form, when its duration may be for months or years, constituting *one of the most obstinate affections of the skin.*

In the model of the hand from *Sarah Ager*, this was the case, the complaint having existed two years. I have no model of urticaria simplex in its acute form, from the circumstance of their not being very readily obtainable, which arises, in the first place, from the uncertain period of the day at which the disease may be at its height, so that the modeller may be at hand; and in the next, from the evanescent nature of the eruption, which in several instances has taken its departure whilst a cast was being taken—the mere contact of the wet plaster being sufficient to chase away every morbid appearance.

Of the second species, *urticaria tuberosa*, there is a very fine example from the arm of Benjamin Mardell, whose case I shall presently relate. In this instance, as in many others of the chronic forms of the disease, I have traced irregular action of the heart, manifested not only by palpitation, but by fits of syncope. I have not, however, detected abnormal sounds by the ear or stethoscope, and, therefore, am not prepared to say whether, like the nettle-rash, the cardiac affection may not be symptomatic of some gastric derangement. There is very little difference in the first appearance of this species of urticaria and that of the simpler kinds; several wheals, however, usually become confluent, so as to create the immense blotches you see on the model, which are stiff and painful, and last for an hour or two, the paroxysm generally recurring in the evening; and as the disease is influenced by remedies, the size of the wheals diminishes, marking with much precision the progress of the cure.

I have been unable very often to find a cause for these chronic examples of urticaria, beyond [illegible] derangement of the circulation before alluded to. No doubt the complaint is aggravated by unwholesome food and repletion of any kind, as also by the abuse of fermented liquors; but I do not think these can be deemed true causes of the disease, otherwise it would be much more common than is the case. My observations, however, agree with those of Willan, that often the indulgence in some article of food, as gruel, sherry, or raisin wine, &c., may produce a paroxysm of urticaria, and continue the malady in its chronic stages. With regard to the *urticaria perstans* of Willan, I shall consider this disease when speaking of *erythema tuberculatum*, with which it is identical; and *U. subcutanea* has been already described under the genus Prurigo—to which it either belongs or is a concomitant. I have already hinted that these demonstrations of urticaria are very common in diseases of the skin attended with much irritation; and in none more frequently than in scabies. I do not think it can be necessary that I should detain you longer with the description of this characteristic malady, to enable you to form a correct diagnosis; I shall therefore proceed to the treatment I have found most effectual, and the recital of a case or two by way of illustration.

When urticaria, in any of its forms or stages, can be traced to the ingestion of any substance, the removal of the offending body by emetics and purgatives is the evident indication; on the other hand, when it is symptomatic of visceral disorders of any kind, these must claim our attention; and lastly, when the disease may be regarded as idiopathic, and no cause can be assigned for its appearance, its cure is to be attempted upon the principle I have recommended where the derangement of the cutaneous circulation has been productive of other maladies of the skin; for this end my experience has pointed to three remedies which have usually proved efficacious—these are, bleeding when the pulse affords no counter indication; colchicum combined with magnesian aperients and iodide of potassium. In a few rare instances where the malady has lingered and tormented the patient *for years*, I have had recourse to large doses of liquor potassæ, and small ones of Fowler's solution, with good effect; but this remedy is only admissible in these cases, and would appear to aggravate the acute manifestations of the disorder. I think it useless here to recapitulate the constitutional treatment required in the event of any disorder of the system, as on former occasions I have endeavoured to make you acquainted with my views; and, therefore, I will at once read a case from the register of *Urticaria simplex generalis sparsa.*

Benjamin Broad, aged thirty-five, residing in York-road, Lambeth, was admitted on the 1st of October last (No. 6,260); having suffered for two days from a scattered eruption of large wheals of a circular figure which were spread over the whole body, excepting the scalp, palms of the hands, and soles of the feet. The spots of this nettle-rash were mostly circular and about the size of a silver penny, appearing for an hour or two after dinner and leaving for the rest of the day, with the exception of a spot or two, which might arise from scratching the part, or from the friction of the dress; there was a degree of "stiffness felt all over the body, and soreness attended with tingling and itching." He could give no cause for the eruption, but stated that he had been harassed a good deal with his work, and had much exerted himself, which he thought had made him "poorly for a day or two before he broke out," since which time he had "inwardly felt better." His tongue was white, skin hot and dry, and bowels not in a good state; so that he was advised to use the vapour bath forthwith, and to take every four hours about ten drops of the wine of colchicum, with a little carbonate and sulphate of magnesia, and to visit me again in three or four days. At the end of this time he presented himself relieved, and was told to continue the same remedies twice a day only, and the vapour bath once or twice a week. At the end of a second four days, I saw him again; all the pain and stiffness appeared to have subsided, and the nettle-rash now showed itself rarely, and in a much diminished form; I therefore advised him to take four or five grains of the iodide of potassium twice a day, and to dust the spots as they appeared with hair-powder, with a view of diminishing any friction to which they might be exposed. On the 17th of October, rather more than a fortnight from admission, he was quite well, and has had no relapse. This was a very severe case in the first instance, and therefore I am inclined to believe that the remedies used were beneficial.

The next example I shall adduce is one of a chronic form of the same disease, *Urticaria simplex chronica*, the *U. perstans* of Willan. This patient, whose malady is represented by the model (No. 5,668), was named Sarah Ager, aged forty, of Plastow, in Essex. She was admitted on the 9th of July last, having suffered one year and ten months from the chronic nettle-rash. By her statement the malady commenced without any assignable cause. Save that she had been weak and indisposed for some time, and had lost flesh, her appearance corroborated the latter statement, for she was a very small woman, as you may judge from the model of her hand, and presented the appearance of having many years passed the age she gave herself. The whole of her body was covered with this rash, except the head and face. It appeared, as she stated, precisely like a bug or gnat bite, and at first was mistaken for these injuries; and the spots remained itching, painful, and swollen, for about three days, when they disappeared, leaving a slight mark on the skin like a bruise, and another crop of the eruption made its appearance. The uneasiness and irritation were greatest at night, and appeared to have been aggravated by all the means she had used. After a careful examination into this case, I could detect no proximate cause for the eruption; the pulse was slow (not more than sixty) and slightly intermittent; there was dyspepsia and leucorrhœa (yet not in a degree to lead you to believe in the existence of uterine disease, which by Dr. Gooch and others has been cited as a cause of this form of urticaria); the bowels and catamenia were natural enough. Under these circumstances the first remedies used were of a general nature, directed for the removal of the symptoms I have detailed; a tepid bath every third day being ordered to equalize the cutaneous circulation, which I regarded as the system most implicated in the production of the rash. She continued these means for a month; and, as she lived some distance from town, her visits to me were at intervals of a fortnight or three weeks. There was little change in the urticaria for the first and second visits, though a slight improvement was visible in the general health. She now took, by my direction, four grains of the iodide of potassium twice a day, for a month, at the

end of which period the eruptions had diminished in number, duration, and size. The model was taken about this time, so that you see its position when the cure was half accomplished. On this patient's first application the wheals were larger and, perhaps, twice as numerous—the resemblance to a bite, or sting, being always very complete, *the central wound of course excepted*. At the end of the third month the disease seemed stationary, and the iodine had begun to manifest its peculiar action on the system, a coppery taste in the mouth and a spongy state of the gums being evident, as though mercury had been administered; and this, notwithstanding aromatics, opiates, and bitters had latterly been given in combination with the remedy. This was in October, three months from her admission, when I prescribed four drops of Fowler's solution with thirty drops of the liquor of potash, twice a day in a weak infusion of senna or rhubarb, and made her stay in town to use the vapour-bath. A very evident change for the better was soon manifested, so that at the end of another month, November 22nd, she had been free from her long-standing disease for nearly three weeks, and I pronounced her *cured*.

I omitted to mention that this patient used warm creosote-water as a lotion, with some apparent advantage, as regards assuaging the irritation of the eruption, which, at bedtime, often prevented her repose.

The case of *urticaria tuberosa* exemplified by the model, to which I point, is that of Be[illegible] Mar[illegible], aged 40, who was admitted on the 10th of last October, 1845 (No. 6,311), after having suffered six months from the eruption you there see represented.

By the account of this patient, the urticaria appeared, with much regularity, about eight o'clock each evening, and took its departure in the course of the night, leaving little or no marks in the morning; it was accompanied with much pain, languor, and lassitude, and a degree of tumefaction of the affected parts, which impeded motion, or when on the face or genitals, as was often the case, occasioned much distortion and disfigurement. With the exception of the palms of the hands and soles of the feet, every part of the surface was visited with this eruption; yet very little of it was to be seen during the day, a spot here and there only. Consequently the modeller waited upon him at his residence, 26, Cure-street, Bethnal-green, and there took the cast before you, which perfectly represents the disease. The account Mardell gave me of the origin of this most rash was not satisfactory, as regards the mention of a proximate cause; he had lived irregularly, like most working men, and his health was not good, but these can only be considered predisposing circumstances. In his pulse, however, which was slow and irregular, I think an indication leading to the true origin of the complaint might be traced; on putting my ear to his chest, I found I could hear the heart much beyond the region it ought to occupy, and much of the regular *tick tack*, if I may so term it, in its beat was absent—a confused murmur now and then supplying its place. I, therefore, surmised there was enlargement and dilatation of the organ, and, consequently, prescribed a chalybeate joined to an alkali and vegetable bitter, and the tepid bath, with a warm lotion containing diluted nitric acid and creosote in slender proportions, to moderate the itching of the surface, whilst, with the view of relieving the immediate symptoms, venesection was performed to ℥viij.

By the end of the first week this treatment had caused some amelioration, so that the same remedies (excepting the bleeding, of course) were continued till the 24th of October, when the spots were reduced from the size you see them to that of an ordinary gnat bite. The sulphur vapour bath was now added to the treatment, to be used twice a week, whilst a dose or two of calomel and the ordinary black draught were superadded to the internal medicines, the continued improvement of the eruption and general health was progressive under this system, and no material change was made, till on the 7th of November he presented himself *cured*, having been about two months under treatment. I should mention that the diet was carefully regulated, and all excesses and stimulants forbidden. This patient again applied about a fortnight ago with a slight relapse, as he thinks, from a return to drinking malt liquor.

A repetition of the medicines and sulphur vapour baths were ordered him, and I may probably see him next week again free from his urticaria, I will then once more take an opportunity of examining the state of his heart.

The subject for next week, gentlemen, will be *Roseola*.

ORIGINAL CONTRIBUTIONS.

PRACTICAL REMARKS ON THE EMPLOYMENT OF IODINE, AND ON THE COMPARATIVE VALUE OF THE LOCAL AND GENERAL TREATMENT BY IODURETTED PREPARATIONS.

By DR. LUGOL.

Translated for the MEDICAL TIMES by ALFRED MARKWICK, Esq., Surgeon to the Western German Dispensary, and formerly Externe to the Venereal Hospital, Paris.

(Continued from page 410.)

In 1832 Dr. Martin, a French physician, practising at Calcutta, had the idea of attempting the radical cure of hydrocele by injecting into the tunica vaginalis an iodated solution instead of weak wine. I have not before me the memoir in which Dr. Martin published his observations, therefore I am not aware whether this worthy practitioner alluded to my works as the source from whence he derived the idea of injecting a solution of iodine into the tunica vaginalis, in imitation of the injections of the same nature which I had had recourse to some years before, in cases of cold abscess and fistulous canals.

However this substitution has never appeared to me to be of much value. The diseases for which we are ignorant of a remedy are still so numerous that it is not wise in us to seek a new one for a disease that can be cured, in the majority of cases, by well known remedies which are always easily procured, no matter how we may be circumstanced in practice.

This, to say the least of it, useless substitution, was nothing more than—a circumstance to be remembered—an extension given to one of my modes of administering iodine, but it was adopted in Paris with an *eclat* it did not by any means deserve, and in the midst of which no allusion was made to Dr. Martin, whose name was eclipsed by that of a, no doubt, very learned surgeon, but whose memory, having been put to too great tests, has become forgetful of the labours of others.

However, experience cannot fail to do justice to these iodine injections. They possess no advantage over the vinous, the efficacy of which is attested by the best practitioners in all countries.

The injection of a solution of iodine into the tunica vaginalis, which has not even the merit of novelty, has, nevertheless, been extolled beyond measure. After having represented it as an actual advancement, as a more certain means of cure, and subject to fewer accidents than the vinous injection, a fact generally contested—it was asserted that this local application of iodine ought to be taken as an example. It is now described as a new channel open to investigators, and, consequently, it has been proposed to inject a solution of iodine into closed cavities, and into chronic abscesses, and it is declared, without hesitation, that these applications of iodine are without precedents, or rather that they have very naturally arisen from Dr. Martin's proceeding, but not a word is said about my writings (a). And yet, as regards all these, my researches were made several years previous to all the trials of this description which have been conceived by their so-called inventors, without any very great deal of trouble, for during the last fifteen years, and upwards, I have been in the habit of injecting ioduretted water into purulent cavities, after the pus has been evacuated by a puncture. They speak so much and in such high terms of this topical application of iodine, and pretend to be so totally ignorant of my works on this subject, that I have felt myself compelled to remind you of them on the present occasion, and for this reason I intend to make you acquainted with certain documents which will leave no doubt on the minds of impartial men as to the priority I claim, not so much for personal motives, as for the purpose of rejecting the exaggerations that are uttered at the present day respecting the radical efficacy of a local treatment in diseases, which, from their nature, are curable by no local treatment whatever.

I will extract from among the cases I have published in my memoirs that which relates to the injection of ioduretted water in cold abscesses and in fistulous tracks, in order to make the local treatment of certain symptoms of scrofula understood according to my doctrine, and to assign to it its rank and importance in the general treatment of scrofulous diseases.

Eloi Macaire, aged 22, presenting numerous and different symptoms of scrofula, had a fluctuating tumour larger than the fist, above the external extremity of the right clavicle, which passed beneath this bone to project in front of the chest. The communication between the two abscesses was easily detected by alternate pressure upon them. On the 12th May, 1830, the subclavicular abscess was punctured, and a pint of pus, or rather of softened tubercular matter, easily recognised by its purulent and caseous appearance, became discharged. After the puncture, which emptied both tumours at once, I injected into the cyst an ioduretted solution, and allowed it to remain for several minutes. The injection was repeated on the following days in the same manner. This patient had likewise several ulcers, which were dressed with the ioduretted ointment, and he was ordered the ioduretted water internally, and three sulphur baths a week.

Fifteen days of this treatment had the most desirable effect on the progress of the disease, the sides of the abscess became adherent, and have continued so ever since. The ioduretted treatment was, nevertheless, persevered in for several months, as this abscess was only one of the numerous forms of scrofula with which Eloi Macaire had been affected since his infancy.

Auguste Dubois, aged 18, entered the Hospital St. Louis on the 24th of August, 1830. Eight days afterwards the following observations were made relative to the injection of ioduretted-water.—A hard nodulated tumour occupied the whole of the right cervical region, unaccompanied by any change in the colour of the skin, or local heat, and producing a very painful compression on the subjacent parts, which it pushed on one side, although it still occasioned an external projection as large as two fists, the head was thrown on the left shoulder, and the skin being forcibly stretched, did not yield to pressure, which however occasioned but little pain, the œsophagus and trachea were also pressed upon, and deglutition and respiration in consequence impeded, so that the patient could swallow nothing but thickened fluids.

September, 1830.—Tumour punctured where the skin was thinnest, escape of a quart of pus mixed with shreds of albuminous matter. Injection of an ioduretted solution into the emptied cyst.

(a) The object in injecting the tunica vaginalis is to produce inflammation of its internal surface, by which its vessels become so modified and altered in their action as to be no longer capable of secreting too great a quantity of fluid. I apprehend, therefore, that any stimulating liquid calculated to bring about this result would be applicable to these cases. The wine diluted with water, the solutions of sulphate of zinc, of alum, of nitrate of silver, and iodine, and the solid nitrate itself, that have been hitherto used for this purpose, act in the same manner as urine or bile, for instance, do when they come in contact with the peritoneum, viz., as irritants. Therefore, and more particularly as the iodine has not, in my opinion, any advantages over the others in this respect, we need not restrict ourselves to it. The sulphate of zinc solution, when of proper strength, will answer every purpose, and has one great advantage in its favour, viz., cheapness.—TRANS.

Immediately after the puncture, the symptoms produced by the compression disappeared, and the patient could swallow and breathe with facility.

On September 20 the upper part of the purulent cavity was cicatrized. It was necessary, however, to open an abscess that had formed in a *cul de sac* of it, and from the dependent part of which the pus could not escape. The cure was accomplished on the 9th of December following.

In the month of September, 1830, I was sent for to a tradesman, aged 30, who had been confined to his bed for nine months. He was emaciated, his complexion straw-coloured, and his countenance expressive of despair, which those who waited upon him appeared to share in. I discovered four fistulæ on the upper posterior and outer part of the thigh. They were deep, but I could not ascertain to what extent with the ordinary probe, as the sight of an instrument made the patient tremble ever since it had been proposed to divide these fistulous tracks, which he had absolutely refused to submit to, notwithstanding the operation had been suggested by one of our most skilful operators. I contented myself with exploring their depth by means of ioduretted injections, which penetrated deeply into the soft parts after passing through numerous sinuosities. This local and investigating treatment was continued, together with the ioduretted water and baths. At the expiration of six weeks of this treatment the patient was able to go and take the shower and ioduretted baths at Tivoli. He returned to his occupation at the end of four months, and was restored at the expiration of the sixth. In this case the ioduretted injections were continued during nearly the whole of the treatment.

Louis Guillaud, aged nineteen, entered the hospital on the 18th of February, 1830, with a chronic abscess on the right external iliac region, and complaining of pain on the slightest motion of the hip-joint. A month afterwards I punctured this abscess, and a quart of pus escaped. Ioduretted water was afterwards injected into the cavity, and the outside of it rubbed with the iodide of mercury ointment. A chronic abscess which the patient had had since the month of September, 1829, on the inner side of the upper third of the thigh, had been opened at the Hotel Dieu, and had remained fistulous ever since, an enormous quantity of pus being discharged through the fistulous opening whenever the limb was moved. Two dressings would not have been sufficient, therefore I ordered the ioduretted water to be injected thrice daily, and the iodide of mercury ointment to be rubbed into the outside of the cyst. On the 10th of April there was no more discharge from the latter abscess; the fistula was dried up. The second fistula, which resulted from the puncture that had been made in the large abscess in the hip, was healed at the end of the same month.

Louis Mornon, aged eighteen, had a spontaneous luxation of the right femur, accompanied by two chronic abscesses, through the fistulous orifice of one of which fourteen fragments of the femur had made their escape. This patient was treated by the injection of iodine water into the purulent cavities. At the period when this case was recorded (June, 1828) I employed only iodine solutions, as I had not at that time discovered the formula for the ioduretted ones.

In my third memoir I have related several cases in which I have employed the ioduretted solution injections in cases of chronic abscess and fistulous tracks; and, after having recited these facts, I have recommended the general employment of these injections in all similar cases. The remarks made are as follows:—"I constantly order these spacious cysts, or chronic abscesses as they are called, to be punctured; and when the tubercular matter has been evacuated, I have them filled with an ioduretted solution two or three times at each dressing. After these injections, which it is evident are analogous to the injection of wine into the tunica vaginalis, the external parietes of the cyst are rubbed with either the ioduretted or the iodide of mercury ointment, and then covered with an ioduretted poultice as hot as the patient can bear it. Guillaud, Cheron, Durent, &c., were dressed in this manner."—(Third Memoir, p. 196.)

Thus nothing is more clearly proved than that my observations were made prior to those that have been in course of publication for some time past, relative to the efficacy of iodine water injections in cases of chronic abscess; and you have just seen that after I changed the iodine solution for an ioduretted one, in consequence of the progress I had made in my investigations, I daily employ it, the latter as an injection for cysts and fistulous tracks.

I have made several other applications of this solution; for instance, I make use of it as a collyrium in cases of scrofulous ophthalmia, for bathing the eyes, and for injecting behind the lids by means of a small syringe.—(Third Memoir, pp. 37 *et seq.*, Cases 5 and 6.) I likewise send a gentle current of the same solution upon the internal angles of the eyes, in order to excite in the lachrymal passages a degree of tonicity which corrects that state of atony and congestion so common in scrofulous subjects. I employ it also as a local bath in cases of coryza and ozæna, in which the patients sniff up the ioduretted water several times in the space of a few minutes. The manuluvia, the brachiluvia, the pediluvia, &c. &c., and all local baths of every description, were formed in the same manner.

In my Third Memoir (p. 186) I have given a receipt for an ioduretted solution for *external use*, in order to replace the iodine solution contained in the first. But, in consequence of the number of injections and iodine lotions required by our patients in the hospital, we no longer carefully weigh the proportions of iodine and iodide of potassium, but compose extemporaneously the ioduretted water, by pouring a sufficient quantity of the rubifacient ioduretted solution (a) into some water, so as to give it the colour of new mahogany. It is easy to judge of the quantity by the eye, and its employment is not attended with the same danger as when iodine is administered internally. The ioduretted water, composed in this manner at the bedside of the patient, serves for collyria, lotions, and injections, by means of which the local condition of the affected parts may be greatly improved.

All these local applications of iodine have been used in my wards at the Hospital St. Louis since the end of the year 1829, and are employed daily in numerous cases. Of this every one is aware, not excepting even those who entertain the learned societies and the medical press with some of them, as so many trials the results of their own imaginations.

Had it been necessary for me to claim merely an indisputable priority, I should not have interrupted the silence; but I had another intention of far greater importance than a personal satisfaction. I was desirous more particularly of pointing out the unfortunate tendency of these unintelligible and retrograde imitations, which, by showing a degree of ignorance of the true therapeutic properties of iodine, lead one to consider the drug and its preparations only as topical applications preferable to those at present employed.

Iodine is substituted for wine; and this substitution is extolled as a very valuable discovery, as a new mode of applying iodine, and as a stepping-stone to several other applications with which therapeutics are about to be enriched. But you have just seen that all these pretended new applications were made known more than sixteen years ago, and that all those which people pretend to foretel have been formally recommended, and formulæ given for them in the three memoirs I published in the years 1829, 1830, and 1831, on the employment of iodine in scrofulous diseases.

Nevertheless, these iodine injections, as also several other ioduretted preparations which are employed in the local treatment, and which I will not mention in this place,—all these topical applications, either together or separately, ought to have but a secondary place in the ioduretted treatment. This consists principally in the internal exhibition of iodine by means of the ioduretted water and baths, it alone is the radical treatment, and its power is but slightly increased by the addition of the local treatment,—an addition which is not absolutely necessary, inasmuch as we have cured scrofulous diseases without even touching the patients, who dressed their wounds themselves with dry charpie, over which was spread a thin layer of ioduretted ointment to prevent it from adhering too much to the soft parts.

You have perceived from the extracts from the cases of Dubois, Macaire and Guillaud, that scrofulous cysts had healed in a short time after being injected with ioduretted water. Why did I not publish the particular history of the rapid cure of these cysts? Because the patients were not cured; for although adhesion had taken place between the parietes of the cysts, the other concomitant signs remained. I should then have been strangely deceived if I had considered as cured patients in whom only one of the numerous signs of the constitutional disease with which they were affected had been made to disappear. These patients in reality were not better cured than a person, having several caries would be, on being cured of one of them after undergoing a few weeks' treatment.

The local means, whatever they may be, all belong to the method, and are valuable only by their timely employment in the application of this method to the different forms of the scrofulous disease. By separating them from this method, and representing them as particular modes of cure, we deceive ourselves and overlook in a measure the tubercular diathesis, without a thorough knowledge of which, we can only blindly undertake the treatment of the diseases which arise from it.

I hardly know how to express my surprise when I see it stated that chronic abscesses have been cured by one month's ioduretted treatment. I place all these particular cases in one category, and formally declare them to be impossible, in this sense—that if the abscesses are cured, the patients are not. I again repeat that the local is but an auxiliary to the internal treatment; the difference between the two being such that the most serious scrofulous diseases may be cured without any local treatment, while this, even when of a special and well-directed character, can produce only a slight amelioration, and that but for a short time.

Those practitioners who so highly extol the efficacy of idoated topical applications are influenced by a spirit of localization which cannot be too much condemned in medicine, their observations are so many erroneous cases which they spread over the field of science, and which are followed by the most unfortunate results in medical practice.

All scrofulous subjects who have been treated by local means are as scrofulous after they have undergone the local treatment as they were before, no matter what the immediate results may have been; their complexion has not changed; they have retained the same predisposition; and we are not long in having proof of it by the appearance of some other sign of the scrofulous cachexy. The practice of medicine abounds but too much in proofs of what I state; practitioners daily witness the occurrence of relapses in cases where cures have been obtained by local means, among which amputation unfortunately stands prominent, in consequence of the vast number of instances in which it is had recourse to. The illusion in this respect is so great that the discretion which almost every surgeon acquires by experience, and in consequence of which he becomes much more temperate in operating as he proceeds in his career, is not taken into account.

The patients, as we stated just now, retain the same complexion they had at first, although they appear to have been cured by local treatment; the fact is, this complexion can be altered only by a proper internal treatment, which must be persevered in for some time. As regards scrofulous diseases, I have laid down the mode of treating them by ioduretted preparations. By the aid of this method iodine may, I think, be administered with as much facility as any other remedy. But the manner in which this substance is generally prescribed in the present day is so opposed to the recommendations I have given that there exists the greatest confusion as regards its employment; [illegible] given, much to the injury of the patients, in

(a) Its composition is as follows:—℞. Iodini ℥ss. Potass. Iodidi, ℥j. Aq. distillatæ, ℥vj.—Trans.

incredible doses, and this abuse of a valuable remedy causes in medicine an actual disorder, in the midst of which practitioners know not which guide to follow, or to what rules to restrict themselves. (a)

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

THIRD SERIES.

Reported by WILLIAM ANDERSON, Esq., Student at St. George's Hospital.

MEDICAL CASES.

SUBJECT—DELIRIUM TREMENS.

(Continued from p. 432.)

CASE 1.—DELIRIUM TREMENS.—Ann Jones, aged 40, dressmaker.

Admitted May 20, 1845. Under Dr. Nairne.

Pulse 108; skin hot and moist; bowels open; tongue white and moist; urine scanty and high-coloured; countenance flushed, and expressive of great excitement; manner hurried; she is constantly pulling the bedclothes about and trying to get out of bed; she is sensible and answers questions, but in an abrupt manner, and immediately afterwards talks about other subjects; she has also tremors of the limbs.

Her friends state that from embarrassed circumstances, she fell into a desponding state and took to drinking. On the 15th she became much excited and could get no rest at night, and this continued until the day before her admission, when the attack came on.

℞. Morphiæ acet. gr. ss.; spir. æther. s.c. ʒss.; spir. lavandulæ c. ʒi.; mist. camphoræ ʒvjss.; 2ndis horis si non dormiat. To have a mutton chop and strong beef-tea.

21. Has had no sleep; is still greatly excited and trying to get out of bed; fancies she sees different objects which frighten her; manner still hurried, but she does not appear to be quite so violent; bowels open; tongue white. To have some bottled stout.

℞. Tinct. opii m. xl.; Aq. menthæ pip. ℥jss.; 2ndis horis si non dorm.

Eight p.m. Has just had a violent epileptic fit, which lasted only a few minutes, and she then slept for about an hour; after which she became calmer, and slept at intervals throughout the night. She took the last dose of opium at 7 P.M., so that she had taken ʒiij. ℈ij. before she had any sleep.

22. Much better; tongue white; pulse 96; skin very hot and perspiring; sweated much in the night; manner not quite so hurried; answers questions rationally; has twitchings of the muscles as if startled; is very thirsty; bowels not open. To have strong beef-tea.

℞. Tinct. opii m. xxx.; spir. æther s. c.; spir. lavandulæ C. aa. m. xxx.; mist. camphoræ ʒxiss. ter die.

23. Slept well; tongue cleaner; pulse 88, quiet; manner still quick, but she is not so startled; is still heavy; has less perspiration; bowels open.

24. Tongue white; bowels not open; slept at intervals through the night, complains of giddiness and swimming before the eyes; is more startled; perspires much, and complains of headache.

25. Tongue clean; slept pretty well, and is less agitated.

Rep. mist. bis in die.

27. Still complains of drowsiness; had a return of tremor last night, and was obliged to have some brandy; still rather delirious; slept pretty well; dreamed much; tongue white; bowels open. Spir. vin. gal. ʒij.

29. Complains of headache; tongue white bowels open. Rep. mist O. N. tantum.

pretty well; dreams much, bowels very open tongue clean.

June 3. Still much agitated, and dreams much; has starting of limbs at night; tongue still white; bowels open. Omit. spir vin. gal.

Rep. Haust. O. N. c. tinct. opii m. xl.

Rep. Haust. O. M. c. tinct. opii m. xx.

5. Looks better; has less appetite; is still restless at night; bowels open, tongue white.

Rep. Haust. O. N.

℞. Mist. camphoræ, ʒx; tinct. hyoscyami, m. xxx.; spir. ætheris nit. ʒj; spir. æther. s.c., m. xx., bis. die; haust. sennæ, ℥jss. cras mane.

7. Sleeps better; has less starting; tongue cleaner.

10. Tongue still rather white, but she is less nervous, and sleeps well.

11. Left cured.

CASE 2.—David Davis, aged 35, hair-dresser. Admitted June 18, 1845. Under Dr. Nairne.

Skin cold and clammy; pulse 96, soft and compressible; tongue coated in centre, red at tip and edges; eyes suffused; bowels open; urine free; superficial veins of face very turgid; he talks incessantly, and answers questions correctly, but immediately wanders to other subjects; he puts out his tongue almost before he is asked to do so; there are great quickness of manner and twitchings of the muscles; he has no tremors; he has had no sleep for three nights; there is no picking of the bedclothes, and he lies pretty quietly in bed; he is a hard drinker, gin being his principal beverage; he has had two previous attacks of the same kind, one four years and the other only six weeks ago; he has complained of pain in the loins for some years, and the legs have been œdematous for the last six weeks, but are not much so at present; abdomen somewhat swollen and contains fluid; skin of a yellow colour.

Seven p.m. Had an epileptic fit, accompanied with strabismus, his evacuations passing under him; the fit lasted ten minutes; afterwards he was more delirious, very irritable, and began picking the bedclothes.

Ten p.m. ℞. morphiæ acet. gr. ss.; spir. æther. nit. ʒj. statim. Haust. sennæ, ʒjss. o. m.

19. Fell asleep about an hour after taking the morphiæ, and slept till four a.m., but not soundly; is more composed this morning; manner less hurried; eyes less suffused; talks less; no picking of the bedclothes; is perfectly sensible, pulse 96; bowels well opened; urine small in quantity and high-coloured; perspires much. Spir. Genevæ, ℥vj.

Rep. haust. nocte et mane.

20. Very delirious in the night; running about the ward, and trying to jump out of window; has vomited some green matter; is quieter this morning; eyes more ferrety; more agitated; talks more; fancies he is at work; has more twitching of the muscles, and is continually getting out of bed; he sweated much in the night; pulse 88, very full and soft; tongue cleaner; urine very thick, depositing a pink sediment; there is no albumen in it.

One p.m. ℞. Tinct. opii m. xxx; spir. ether, s.c., m. xxx; mist. camphoræ, ʒxi. statim et 6tis horis. Mutton chop and bottle of stout.

Half-past 11 p.m. Became furiously delirious; trying to bite the nurse, and getting out of bed; fancying the house was on fire. Strait-waistcoat obliged to be put on.

21. Had no sleep; delirium continues, but he is more exhausted; constantly talking, and swearing at the nurse; has made no water since 6 p.m. last night; catheter passed, and about ℥ij. of thick urine drawn off; perspires profusely; bowels not open; abdomen hard and tympanitic; sordes on teeth and lips; pulse 120, quick and soft; tongue still loaded, moist; urine contains a little albumen; does not take his chop. Two bottles of stout; spir. vin. gall. ℥iv. ℞. Pil. colocynth c hyoscyamo, gr. x. statim.

22. Had a sleepless night; was very restless, and furiously delirious at *intervals*; countenance pale and haggard; more sordes on teeth and lips; has a slight cough; breathing hurried; sweats profusely; tongue red and dry; pulse 131, fuller; abdomen softer; bowels well open; very small quantity of urine drawn off; there is a great *prostration* strength. Aug. spir. vin. gal. ad ʒviij.

℞. Spir. æther. s. c., m. xx.; camphoræ gr. v.; Mist. acaciæ ʒij.; tinct. opii ʒj.; aq. pimentæ ʒix. post hor. ij. et rep. vesp. To have an egg. Omit. alia.

Seven p.m. Had two epileptic fits following closely; each lasted ten minutes; he then became comatose, and remained so till ten p.m., when he threw up some blood from the mouth, and died instantly.

SECTIO CADAVERIS.

Thorax.—Old and very extensive adhesions, uniting the right lung to the sides of the chest; the lung itself was throughout its whole extent loaded with large quantities of red frothy serum, except at the back part of the lower lobe, where the structure was condensed by red hepatization, and soft in texture. The left lung was also loaded towards the back part with red frothy serum, which came out in large quantities when the parts were cut. In both upper lobes there were on the surfaces of the lungs depressions with puckered edges, where the tissue of the lung was condensed, and contained several tubercular deposits. No tubercular matter was found elsewhere. The heart was pale in colour and soft in texture; all its cavities were dilated, but without any hypertrophy of its walls. Both the aortic and mitral valves were slightly thickened and somewhat contracted. The other valves were healthy. The blood contained in the cavities of the heart was fluid and very thin. A few patches of erythema existed at the root of the aorta.

Abdomen.—The peritoneal cavity contained a small quantity of dark-coloured serum. The liver was of a fawn colour throughout its whole extent; its margins were rounded, and its surface presented a well-marked granular appearance; when cut into, the structure of the organ presented a variegated appearance from the condensation of the cellular tissue, which in several places had separated the acini and compressed them. Both kidneys were large and congested on their surfaces and lobules; the capsules peeled off easily, and their surfaces presented in several places slight depressions, as if the cortical structure had disappeared; in the other parts the surfaces were perfectly smooth. Other viscera healthy.

Cranium.—The dura mater was more than usually adherent to the calvarium. The subarachnoid cellular tissue and pia mater were filled with large quantities of clear fluid. The cineritious substance was pale, and the white matter presented slight venous congestion. The ventricles were not enlarged, and the structure of the brain appeared to be perfectly healthy.

REMARKS.

Delirium tremens is unfortunately not at all uncommon, but at the same time it is necessary to be careful and prompt in our diagnosis, for there is a disease with which it is sometimes confounded, and to which in some points it certainly bears a strong resemblance: I allude to inflammation of the brain and its membranes; in this case the most active antiphlogistic treatment must be at once employed; but in delirium tremens this plan would only aggravate the disease and bring it speedily to a fatal termination.

(a) Some short time since, M. Berard related to the Société de Chirurgie a case of hydrops-articuli, or hydarthrus, arising apparently from disease of the cartilages, where he had effected a cure (after various other remedies, both local and general, had failed) by means of an iodurctted solution, composed of iodine 5 parts, iodide of potassium 5 parts, alcohol 50 parts, and water 100 parts, injected into the cavity of the joint, its fluid contents having been previously removed by a trocar introduced in an oblique direction. A good deal of reaction followed the operation, and the knee became still more increased in size; it gradually, however, diminished to a certain extent, and then remained stationary. On the 24th day after the injection, M. Berard made a second puncture, which gave exit to a reddish-coloured serosity, smelling strongly of iodine, and containing numerous bodies resembling split rice. A second injection was then administered, and the punctured wound closed, as in the first instance, with a piece of diachylon plaster, and covered with a bandage dipped in cold water. As no tumefaction or fresh accumulation of fluid had taken place at the end of a fortnight, the joint was placed in a dextrine bandage, and retained there for about three weeks, at the end of which time the patient was able to leave the hospital.—TRANS.

This disease is well illustrated in cases (1 and 2).—Ann James was admitted with all the usual symptoms of delirium tremens; countenance flushed and bearing an excited expression, could answer questions correctly, but immediately wandered to other subjects; she had tremors, and was continually picking the bedclothes, her manner was hurried. Now, these are the common symptoms in most cases of this kind. There are, however, one or two points which mark the difference between this disease and inflammation of the brain and its membranes: there is the same want of sleep in both cases, and there is delirium; but in encephalitis the delirium is constant and generally violent, and the patient cannot answer questions rationally; the pulse, too, is hard and frequent, whereas in the other it is generally soft and compressible; the skin, too, is dry and parched, and here arises our great mark of distinction: in delirium tremens the skin is always moist, and generally there is profuse perspiration. In delirium tremens there is always a peculiar hurried manner; the patient is exceedingly anxious to do everything quickly; he will start upright in bed at the appearance of his medical attendant; he will thrust out his tongue almost before he his asked, and perform every action in the same abrupt manner. In addition to the symptoms which mark the attack, our diagnosis is generally confirmed by the previous history; we almost invariably find that the patient is an inveterate drunkard, and frequently that the accustomed stimulus has been suddenly cut off. How many striking examples of this do we not see in surgical cases. A drunkard meets with an accident, he is restricted as to his diet, and his stimulus is stopped; an attack of delirium tremens is the consequence; and this, perhaps, is the first thing which opens our eyes to the patient's previous habits, for there is frequently a great desire to conceal the fact, probably through shame.

In the treatment of this disease our grand object is to obtain sleep, to soothe and calm the excited state of the nervous system, and in this manner alone can we ever hope to effect a cure. Opium is our great sheet-anchor, and I am inclined to think, from watching the effects of the various preparations, that the tincture is the most efficacious. The occurrence of sleep in most cases enables us to give a favourable prognosis. It is not always, however, that we can obtain sleep for our patients by the administration of opium alone, and then, to use the old expression, we must give them "a hair of the dog that bit them"; often some good bottled porter, or a strong glass of brandy-and-water, will at once produce the effect. In the case of Jones there was no sleep till she took some porter, in addition to the laudanum; she then slept, and from that time became calmer, her symptoms abated gradually, and she recovered. The case of David Davis was not, however, so successful, and, considering all circumstances, we could hardly expect that it should be so. In the first place, it was his third attack; and, in addition to his delirium, he had disease of the liver and kidneys. He, however, slept, and we might therefore have had some slight hope of his recovery, inasmuch as it showed that his system could be affected by anodynes. This man died, but I do not intend to say much concerning the post-mortem appearances in this paper, as I wish to reserve them to illustrate another subject. There was considerable venous congestion in the brain, and effusion into the sub-arachnoid cellular tissue, which are exceedingly common appearances in the brain of a drunkard. I shall not make any remark on the appearances of the liver and kidneys, at present: for although, no doubt, they were caused by his intemperance, yet they do not necessarily occur in these cases.

NAVAL APPOINTMENTS.—Dr. David Graham Miller, to be Surgeon of the Sidon. Mr. W. T. Domville, to be Assistant Surgeon of the Excellent, Mr. George J. Roberts, to be additional Assistant Surgeon of the Vindictive. Mr. W. Evans (b- acting ditto. Dr. Archd. Armstrong, additional Acting Assistant-Surgeon of the Caledonia. Mr. Augustus R. R. Preston, ditto. Mr. Andrew Clark, additional Acting Assistant-Surgeon to the Victory,

KING'S COLLEGE HOSPITAL.

CASE OF PUNCTURED WOUND INVOLVING THE KIDNEY.

Reported by HENRY SMITH, Esq., House Surgeon.

John Sullivan, a tall athletic Irishman, aged 26, was admitted August 17.

Whilst at work he had some words with a fellow-countryman, who pulled out a long clasp-knife and struck Sullivan twice in the back. The loss of blood was great, and he fainted before he was brought to the hospital.

On examination there were found two punctured wounds: one just below the inferior angle of the left scapula, about half an inch in length. On examination with a probe, the wound was found to run upwards and inwards underneath the muscles and integuments to the extent of three inches. The other wound was situated between the ninth and tenth ribs of the same side; the puncture was of the same size and shape as the other. A probe could be passed upwards and inwards to the extent of five inches, towards the spine, underneath the muscles, above the ribs. Although a most careful examination was made, the probe could not be passed underneath the ribs; the wounds were therefore considered to be superficial; they were dressed with water-dressing, and strict quietude was enjoined.

At twelve P.M., five hours after his admission, I was called to him, and found him rolling about in the greatest agony. He referred the pain to the situation of the lower wound; he could not bear the least pressure there. Whilst I was examining him the nurse showed me the urinal, which was half full of bloody urine which he had passed before I was called to him. There was no vomiting; he had great thirst; pulse 80, pretty firm. I ordered twelve leeches to be applied over the region of the kidney, hot fomentations to be used constantly, and the following powder to be taken directly:—

℞ Hyd. chlor., gr. v.; P. opii, gr. j.; P. antimonii, co. gr. iij., m.

18th. He felt great relief from the leeches, and after taking the powder he fell asleep for several hours. He complains of pain, which is much aggravated by pressure over the situation of the kidney in the track of the wound. There is still a considerable quantity of blood coming away by the urethra; has some pain in the left side whilst taking a deep inspiration, and he is troubled with a hacking cough. Continue fomentations. ℞. ant. p. tart., gr. ¼, 4tis horis.

19th. Much better; pain in back is less, but the urine is still very bloody; feels pretty comfortable; cough rather troublesome; there is a little moist crepitus heard at the lower part of left lung. Repetat.

21st. He is progressing very favourably; the urine is much less bloody; he complains of pain in the lower wound; his appetite is good, and he does not appear to have suffered much from the loss of blood he has experienced; cough is better, and pain in the chest less.

℞. Mag. sulph. ℥ij.; vin. ipecac. m. xx. ter die.

24th. Urine merely dusky; he feels pretty well, with the exception of some pain in the back, and weakness. He is allowed to get up.

26th. He is so well as to be able to go to the police-office to prosecute the man who stabbed him. The wounds are not entirely healed; urine clear. 29th. Discharged cured.

This case presents one or two points of interest. In the first place, wounds of the kidney are rather rare cases in civil surgery. It is not so much exposed to injury as the other important organs of the abdomen and chest—at least, to an injury of the kind received. In the next place, it was not considered, when the man was first admitted, that any important part had been injured; as careful examination with the probe showed that the wound was only superficial. But there can be no doubt, from the symptoms and from the situation of the wound, that the kidney was injured. Fear was at one time entertained that the pleura was punctured, from the pain in respiration and the cough; but those symptoms soon gave way under the use of a little tartar emetic; and it seems probable that the membrane lining the chest escaped injury.

TO CORRESPONDENTS.

A Student in the Country *will see the prospectuses of the London and Birmingham Medical Schools advertised on the cover of the* Medical Times. *We can give no opinion on their respective merits. If our correspondent desire to become a "distinguished" student we should advise him to devote all his time during his residence in town to the study of his profession.*

Mr. Clarke. *Two medical directories were published in January, 1846; one only professed to give the qualifications and addresses of medical men residing in London and its immediate vicinity; the other proposed to give a list of all members of the profession practising in England and Wales. The "London Medical Directory" was published by Churchill, and was a second time issued in Jan., 1846, the "General Medical Directory" was published in 1845, and has not since appeared. We presume, therefore, that it is the latter for which circulars have been lately transmitted to members of the profession. Neither of these works was quite perfect, but the "General Medical Directory," on account of the greater extent of its scheme, and the greater difficulty of obtaining correct information from remote parts of the country, from the absence of post-office directories, was considerably the more incorrect of the two. A report of the successful progress of the* NATIONAL INSTITUTE *will be found in another column.*

Mr. H. R. Collier, M.R.C.S., thus writes:—*"Having, by chance, yesterday, looked over the last few numbers of the* "Lancet," *I was much surprised to see some remarks regarding the distribution and value of the prizes at the Westminster Hospital School of Medicine. Of the distribution, certainly nothing can be said; but of the prizes I feel myself called on to contradict the statement of* 'A Pupil' (?). *I received, as the midwifery prize, a very handsome case of obstetric instruments from Drs. Bird and Andrews, and two handsome volumes of the* 'Standard Work on Medicine,' *by Dr. Watson, as a prize for that subject, from Dr. Roe. I feel it would be injustice to those gentlemen, after the published statement of* "A Pupil," *did I not contradict in as public a manner his assertion."*

An Observer.—*The "great unknown," whose authority was mentioned by the coroner, is probably not in existence.* "Quackley" *was sufficiently cautious to suppress all reference to his name. We never read the* Satirist.

A General Practitioner.—*The notice of the judge is disgraceful.*

A Pupil at the Westminster Hospital.—*We are quite aware of the proceedings of the "healthy skin" gentleman. The governors of the Westminster Hospital are too clear-sighted and independent to be imposed on by* "pulpy softening."

Several communications have been received, and are under consideration.

Medicus.—*We shall next week publish the report of any proceedings at the meeting of the British Association that may be interesting to our readers.*

Studens.—*The National Institute.*

An Admirer *should write to the secretary of the college.*

A Poor Patient.—*We never prescribe in the* Medical Times. *Our correspondent may obtain advice by applying at any of the Metropolitan hospitals.*

The secretaries of the medical schools in London and the provinces are requested to transmit their prospectuses without delay to the editor of the Medical Times, *in order that abstracts of them may be made sufficiently early for insertion in the students' number of that Journal.*

F.R.C.S.—*The Library of the College of Surgeons will continue closed until the commencement of the winter session.*

☞ *Gentlemen in arrears are requested to forward their subscriptions during the ensuing week, in order not to be entered in our list of defaulters.*

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 12, 1846.

> "Hic mecum licet, hic juvence, quicquid
> In buccam tibi venerit, loquaris."—MARTIAL.

THERE are certain seasons when news and novelty are so scarce, they are not obtainable at any price. The present happens to be one of them. Nothing just now is in the ascendant but what everybody knows, and nobody thinks worth talking about. Things, or rather topics, have literally reached their level; to go ahead is about as possible as to square the circle; there is no wit worth laughing at, and no wisdom one cares to listen to. The "busy world," that poets and fiction-mongers are fond of making a fuss about, seems to have laid by business altogether, determined to have one of those periodical naps that appear to be necessary to its renovation. Like a great sea in a calm, it lolls lazily, seeming to care not a fig whether it ever "wags" again, and coolly leaving us, its deserted offspring, to get over it, or through it, as best we can.

Parliament is regularly "used up"; and St. Stephen's, as deserted and disregarded as though it had never flourished respectably in the annals of topography. "Members" are scattered hither and thither—some trying to get rid of their accumulated carbon, and infuse a little warmth and freshness into their parchment skins, by wandering over hill and dale in search of any stray partridge that will give them a chance of a shot; and others are rolling about in their easy chairs, or snoring away in bed, in the hope of recovering the complement of sleep and rest they lost in listening to the tedious twaddle of last session.

Lecture-rooms are shut up, professors are at play, and skeletons swing idly in dusty museums, to show that anatomy and its kindred sciences, at this particular time, are at a discount. Physicians and surgeons walk mutely through the wards of their respective hospitals—for there are no students to prompt them to clinical eloquence, by gaping and staring for any words of instruction they may casually drop.

Booksellers have little to do, and less to sell. The periodicals, medical and miscellaneous, are born at their respective seasons—but few of them are free from sickliness or debility, and many are palpable abortions. Sundry that we could name appear to have reached the "turn of life," and suggest to patrons and proprietors the unpleasant probability that their days of increasing and multiplying are all numbered. In the systematic work or text-book line there is little astir. Scribbling is not out of date—but it would seem, by implication, to be out of fashion. Authors are either too poor, or publishers too wary, for that autumnal outpouring of new works on physic that was so customary a few years back. Not that we think the world loses anything by the absence of this literary profusion—perhaps we should be better off in our libraries if nine-tenths of the scribblers who have wasted ink and paper had never known the scholastic use of either.

As we have said, everything seems to be "weary, stale, flat, and unprofitable." However it might be in Solomon's time, there clearly "nothing new under the sun" among us. The cholera, as folks call it, excited a little commotion and rumbling awhile ago; but it appears to have got tired of draining the community, and is lazily dying a natural death. The Hounslow inquest was certainly something novel—but, as it was *past a joke*, we must not pause in our good nature to treat it lightly.

In a dearth of matter of fact like that we complain of, what is an editor to do for the edification of his readers? And, as there is an equal dearth in matters of fancy, what must he do for their amusement? If any wiseacre says, "Write about nothing," we tell him to try the experiment himself, and see how he likes it! To write about anything is a task of some trouble to most people; but to perform a similar feat about nothing goes beyond all we profess to be master of. *Litera scripta manet* is an old axiom, that has often curbed the impetuosity of an author's pen; when thoughts get upon paper they are very much like being stereotyped—there is no saying what criticising they may get. A jocose old classic says, a man had much better *talk* like a fool than *write* like one: for this reason it is that, when authors have nothing to deal with, silence is their best safeguard. But an editor, unlike authors in common, is not his own master; and worse than this, he has more people to please than are always easy of gratification. If he have really nothing to write about, nobody believes him—or at least he is not allowed to plead the Lucretian pretext—

> "Nihil igitur fieri de nihilo posse fatendum est."

Unhappily for us, we belong to that old-fashioned race of writers who can draw inspiration from nothing but ourselves. Were we like Horace, a bowl of Falernian might prompt our genius; like Johnson, Pitt, or Sheridan, an inferior grape might serve us; like Fox, its distilment, known as brandy, would suffice; like Byron, gin-and-water would supply our nothingness; like Pope and Fontenelle, we could derive the same aid from coffee; like Newton and Hobbes, from the fumes of tobacco; like Hall, from strong tea; and like Haller, from copious draughts of cold water. Alas! we are not like any of these said worthies, and therefore cannot be expected to do in any wise as they did. Of course, then, in the absence of a text or theme, we can scarcely be required to furnish a very definite discourse. . . . .

We were about to throw down the pen altogether, to make our bow for the week, and ask our readers to hope better things from us another time, when it occurred to us to remember that the annual incubation of the British Association is now taking place at Southampton. Faith, here's a subject ready made, and one that is as empty as need be! If we manage to write upon this, in good truth we shall have composed something upon nothing. Think of that, revered shade of Lucretius!

We wonder how Southampton feels, and what it thinks of itself, now it has got within its precincts the august body composing the British Association for the Advancement of Science! How the old walls of the venerable place must tremble and quake, on the contemplation of the awful advances that science may possibly make within their hearing, in the course of one short week! We should not be surprised if the overwhelming influx of knowledge were to prove too much for the old place, and tumble it down about its own ears. We know that "knowledge is power," and this latter is somewhat synonymous with "physical force"; so that there is really no saying what the consequences may be of letting off too much discovery at once! Moreover, when we consider how many "great guns" are gone, open-mouthed, ready charged, and primed, fully intending to fire their best, it is quite a matter of doubt what the concussion will amount to. The quantity of smoke, again, will be very serious—stifling we should say! We trust, however, that the larger and more intelligent guns will see the propriety of keeping close together, and firing in due succession; at the same time having their eyes, or their mouths (which mean the same thing), warningly directed towards the smaller fry—pistols, popguns, and so forth—to keep them in obedience until their proper time for going off shall have arrived. On the arrival of that said time, the sooner they are gone off the better!

It is said that Prince Albert intends to honour the Association with his presence. No doubt Science, in the abstract, will consider herself very much obliged to his Royal Highness for the gracious notice he condescends to take of her. Of course, royalty generally has a sort of inherent title to intellectual distinction, without the trouble of working for it, like ordinary people; or, were it not so, we should very much like to have heard that the Association had been favoured, not only with the presence of Prince Albert (in which it is not distinguished above the opera), but with some trifling contribution from the royal pen. Princes may afford to make a joke of knowledge, because they have enough and to spare; but ourselves, who are more scantily provided, are glad to catch all we can. Any trifle from regal quarters would be thankfully received.

Of course there will be the usual influx of our continental neighbours, bringing plenty of information, and going away laden with something much more substantial. Names of all sizes, and of all possible varieties of pronunciation, are advertised to appear; the only anxiety we feel, is for the poor waiters, and others in minor offices, whose duty it will be to give utterance to these strange denominations.

One of the chief features connected with the meeting of the British Association for the Advancement of Science, is its gastronomical department. So transcendent is it in this line that it might be a *coterie* of cooks, rather than an aggregation of all the literature and science the world has in it. The fact, however, is curiously illustrative of an old physiological axiom, which tells of the great sympathy between the stomach and the brain. Of course guns cannot be expected to go on shooting for ever—they must become exhausted, and then they must be filled again. So it is with man! When

he has emptied his brain, he forthwith makes up for it by filling his stomach. The terrible onslaught upon the head that the members of the British Association will no doubt suffer from, will make it incumbent upon the Southampton people to relieve by as ample gastronomical supply as they can get. It has always been usual to furnish these said things in profusion, and we have never yet known them wasted.

"Quid dignum tanto tibi ventre gilaque pieralor?"

Whilst, however, the roar of intellectual artillery is going on deliciously upon the coast we trust that some slight reverberation or echo may reach us who remain more inland. We have always thought it too bad for the Association to be so avaricious of its mental wealth. This is a commodity it overflows with, and yet it refuses to give any of its treasure away! The stock in hand must be enormous—our wonder is how they find warehouse room for it! Of course a great deal that has never seen light must, by this time, have got very mouldy, and therefore, the Association may not like to expose it. In consideration, then, of its venerableness, it is quite welcome to remain *in statu quo;* but we do earnestly entreat that, for the future, the Association will be less niggardly of its riches, and give us something, though it should be merely the skimmings, of its ample ocean of scientific wealth.

MEETING OF THE NATIONAL INSTITUTE.

A well-attended and highly-influential meeting of the members of the National Institute was held at the Hanover-square Rooms, on Wednesday evening, September 9, for the appointment of treasurer and trustees, and for the consideration of the measures requisite in order to elect a council to conduct the affairs of the Institute.

Mr. Clifton moved the first resolution—"That R. R. Pennington, Esq., be requested to take the chair." This, he said, was due to the venerable gentleman who had presided over so many meetings since the establishment of the body now about to merge into the NATIONAL INSTITUTE OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY. The resolution was carried by acclamation.

Mr. Bonney then moved, "That George Ross, Esq., be appointed Secretary *pro tem.*" Mr. Bonney, in proposing this resolution, paid a well-merited compliment to the zeal and ability with which Mr. Ross had filled the office of secretary to the National Association.

Mr. Lobb seconded the resolution, which was carried unanimously.

Mr. Pennington then rose, and, after explaining the purpose of the meeting, said that he held in his hand a letter from Messrs Bird and Ancell, which, if it were the pleasure of the meeting, he would read to them.

The letter was then read, as follows:—

"TO THE MEMBERS OF THE NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

"GENTLEMEN,—The National Association having accomplished a most important object in furtherance of the cause of medical reform, by the proceedings of the general meeting held on the 12th day of August last, the period has arrived when the duties which have devolved upon us for nearly two years as your honorary secretaries are necessarily brought to a conclusion. We beg leave to be permitted to address you a few lines on retiring from our office.

"In the latter part of the year 1844, when a Government bill for the regulation of the medical profession was before the public, our highly esteemed president, R. R. Pennington, Esq., supported by several influential general practitioners of Marylebone, and a number of the leading members of that branch of the profession of the city of Westminster, held a meeting for the purpose of considering the necessity and the practicability of organizing the great body of the profession, to watch the progress of medical legislation, and to place the general practitioners in a position to communicate their views to the Government and the colleges, with that weight and authority which a combination of intelligent and educated men ought to possess, in matters deeply affecting the interests of their own particular body. At that meeting it was resolved that an effort should be made to form a Voluntary Representative Association, for the purpose of effecting those objects which the interests of the general practitioners demanded; and a public meeting was accordingly convened, at which meeting, among other matters, it was determined to endeavour to effect a union between the various metropolitan and provincial associations formed for similar purposes. This meeting constituted the nucleus of a more general combination, which ultimately became the National Association, and numbered between four and five thousand members. The union and organization of the general practitioners were regarded as an indispensable step to secure an efficient measure of medical reform.

"When Mr Pennington took the lead in this great movement, we were requested by him and the provisional committee, and subsequently by the numerous and highly respectable and influential committee to which the affairs of the association were intrusted, to act as honorary secretaries. Feeling strongly the obligations which the profession was under to a body of gentlemen who could have no motives of personal interest or ambition to serve in standing forward to fight the battle of the public for a high standard of qualification on the part of every individual authorised by law to practise medicine and surgery, and thereby to secure the true respectability of the great body of the profession, we expressed our willingness to give our best exertions in any way the committee might deem most desirable, but with considerable misgivings as to our ability to perform the duties which the importance of the cause and the urgency of the case might require at our hands. The turmoil of political agitation of any kind was contrary to our habits, and must necessarily prove a great interruption to our ordinary avocations. The request entailed upon us obligations which we feared no efforts of ours could adequately discharge; but feeling that, in the impending struggle, great interests were at stake, we regarded it as a duty incumbent on every individual to do his best in aid of the common cause. It would have afforded us the greatest satisfaction if individuals more competent, and with more ample time at their disposal, had been selected for the office.

"We need not remind you, gentlemen, how rapidly business accumulated upon us. The organization was achieved in an almost incredibly short period; other and graver duties arose, requiring still greater exertions, and making much larger demands on our time and attention. Stimulated, however, by the example of our venerable president, and animated by the zealous and disinterested labours of the committee, who have devoted their time and attention unremittingly to the important business of the association, we could not relax in our efforts or press our resignation, although, like other members of our arduous profession, we had our daily routine of professional engagements. Upon every occasion we have endeavoured to carry out the wishes of the committee, of the local secretaries, and of the members of the association, to the best of our judgment and ability; but if in individual instances any apparent want of attention to the various communications or suggestions with which we have been honoured has occurred, we beg to express our sincere regret, and trust that it will be attributed to the causes above stated. The kind consideration we have at all times experienced from all with whom we have co-operated, and the handsome manner in which our exertions have been acknowledged at general meetings of the association and by the committee, are an ample reward for the services which were required of us; and the approbation expressed by our professional brethren on those occasions will ever be held in grateful remembrance by us.

"The discussions, the correspondence, and the negociations in which we have been engaged, have necessarily brought under review the whole bearing of the medical question, and our opportunities have been calculated to make us acquainted with the various opinions entertained by our professional brethren on the subject of medical reform. It would be presumptuous in this valedictory letter to intrude our individual opinions on the different questions which have been so warmly agitated during the late attempt at medical legislation; but we cannot help remarking that a patient and careful consideration of the causes which operate, both favourably and prejudicially, on the medical profession in this country, has led us to the firm conviction that a measure of medical reform which would promote the interests of all classes is attainable by the profession. We are satisfied that the evils which the profession labours under, and the obstacles to a reform, have depended, in a great measure, upon the profession itself,—upon corporate jealousies, mutual distrusts, and conflicting interests; and especially upon a miscalculation, on the part of corporate bodies, of the feelings, customs, habits, opinions, prejudices, and requirements of the community, as respects sickness and health, and a consequent misapprehension of the interests of the public as respects the great body of the profession—the general practitioners.

"The members of the association, and of our own class in the profession, will allow us to remind them that our venerable president has been engaged in general practice for upwards of sixty years, and throughout that period has enjoyed the confidence—the entire confidence, in matters of life and death—of a most numerous circle of patients and friends, including many of the most highly educated and highly gifted individuals which this or any other country ever produced. No class in the profession can bring forward a name that can boast a higher reputation or more successful career. The general practitioners, of whom Mr. Pennington is the exemplar and the type, are the physicians and surgeons of the great mass of the people of this country; they are educated for the performance of all the duties of the physician, the surgeon, and the accoucheur; their assistance is sought for by the public on all occasions; their advice is acted upon in the most important stages of disease; they take the entire responsibility in every department of practice, and in the performance of these functions they have obtained, as a class, the confidence of the community.

"As humble members of this numerous—this essential—this highly important and useful body of men, recognising, in an educational and scientific point of view, no distinction between the practice of physic and the practice of surgery—a body hitherto possessed of no corporate rights or privileges, no home of their own—we congratulate our coadjutors that their organization, which took its rise, and was to a considerable extent matured, to serve the purposes of an emergency, is not to be broken up. It is a subject of unmixed satisfaction in our minds, that the object for the attainment of which our best energies, with those of your committee, have been directed during the late excited period, is to be fully carried into effect, and that the National Association is to be rendered permanent as a 'National Institute of Medicine, Surgery, and Midwifery.'

"We earnestly hope that the Institute will not only be permanent, but powerful also; that the whole body of respectable general practitioners in the kingdom will join it, and contribute by their unity and exertions to effect those ameliorations in the profession so much demanded. The union of some thousands of educated men in a voluntary representative institution must be irresistible for the attainment of all just and reasonable objects. In conclusion, we trust that our desire to see our own class established in its rights and privileges will never be misconstrued into any want of respect for the other classes in the profes-

sion. The elevation of the profession as a whole must ever conduce to the true respectability of all its parts. The failure of the recent efforts at medical legislation will, we earnestly hope, be a guarantee against any future attempt on any other principle, than that of elevating the literary and scientific character and the social and political importance of the whole profession; and we trust that the establishment of the National Institute will enable the general practitioners to secure that position in any new arrangement of the medical institutions of the kingdom which their extensive sphere of usefulness so fully entitles them to hold.

"Gentlemen, with every wish for the prosperity of the National Institute, the interests of which we shall ever have at heart, and shall use our best exertions to promote, and again thanking you for the cordial and unanimous approbation you have manifested for our public services,

We beg to subscribe ourselves,
Most respectfully,
Your obedient humble servants,
"JAMES BIRD.
"Sept. 8." "HENRY ANCELL.

Mr. Propert, in moving the first resolution, said that no explanation of it was required. The resolution spoke for itself. He then read the resolution as follows:—

Resolution 1.—"That John Dodd, Esq., and Edward Tegart, Esq., be requested to act as treasurers to the National Institute, and that the treasurers be two of the trustees of the property of the Institute."

He considered nothing would be of so much importance to the new Institute as the appointment of good officers to conduct its affairs. All knew how well the gentlemen who had acted as treasurers to the National Association had fulfilled their duties, and he hoped to see the affairs of the National Institute, into which their association had that day merged, as well conducted—he did not believe it could be better done. The first association had originated in a "sky parlour" in the parish of Marylebone, and, from its infancy to its present maturity, the treasurers had spared no pains or exertions in its service. Without ammunition no good could be done, and without fit and proper men to distribute that ammunition it would be of little use. He hoped the Institute would give its treasurers full employment for years to come.

Mr. Liddell seconded the resolution, which was put, and carried unanimously.

Mr. Squibb, in proposing the second resolution, would make but few remarks. He wished to impress on the gentlemen present that the National Institute was to be a permanent union—an organization of the general practitioners which should be a perpetuity—an organization that should keep up the dignity of the profession, and one without which the general practitioners, as a class, would be lowered by the colleges. He would read the resolution:—

Resolution 2.—"That James Clayton, Esq., and Thomas Davies, Esq., together with the treasurers, be requested to act as trustees of the property of the Institute."

He looked forward with hope that in a very few years the Institute would be in possession of a large amount of property, in the shape of books, preparations, &c. He hoped that each member would look on the Institute as a matter of personal property—as a new house—and that each would contribute with the same zeal as if he were furnishing a new house.

Mr. Brown perfectly coincided with Mr. Squibb on the subject of making each member's interest in the Institute a personal matter. The general practitioners had been the last branch of the profession to unite, and consequently they had hitherto been insulted by the colleges, and treated with indignity by all parties. They had seen the Pharmaceutical Society established around them, and formed into a firm organization; they had seen its representatives, when any measure affecting the rights of the body had been brought forward by the Legislature, come boldly forward, and heard them say "We will not have it so." Then, again, just without the bounds of the profession, they had seen the Association of Veterinary Surgeons gradually rise into an improving profession, gradually acquire a *locus standi* with the public, and gradually become a scientific body. General practitioners, on the other hand, forming a body large enough to swallow up all classes of the profession, had hitherto had no point of union. He trusted that, for the future, an organized body would exist, which would be listened to with respect by all classes. It would be of great moment to form the Institute, before the next session of Parliament, into a perfect body; and he hoped that all practitioners, from all parts of the country, would come forward generously in its support. He hoped that all—both country and town practitioners—would now be united in one general HOME. A few years ago this would have been impossible; but even now, with the great facilities of railroad communication at present existing, centralisation by no means equals what in three or four years it must become. He was convinced that in a few years the National Institute of general practitioners would form an organization containing a class of men of such standing that no body, corporate or otherwise, would be able to avoid treating them with consideration and respect. He hoped that all would agree with the resolution.

The resolution was then put from the chair, and carried unanimously.

Mr. Camplin, in proposing the third resolution, which had been put into his hand since he entered the room, would only detain the meeting to call their attention to the fact that the committee had hitherto had considerable trouble, and that they had ever acquitted themselves in such a manner as to deserve the most unbounded confidence from the members of the Institute. He then read the resolution.

Resolution 3.—"That the trustees, with the treasurers and the other members of the provisional committee, appointed at the Hanover-square Rooms on the 12th day of August last, be a special committee to conduct the election of the council; that they be requested to prepare and submit a list of members whom they deem most eligible to constitute the first council for the suffrages of every member of the Institute, with a distinct intimation that every member is at liberty to substitute any other names in his polling paper which he may deem expedient, and that the polling papers be returned on or before the 31st of October next."

Mr. Hood seconded the resolution, which, he said, had his most cordial approbation.

The resolution was put, and carried unanimously.

Mr. Bowling, in moving the fourth resolution, said that the meeting had hitherto been employed in appointing treasurers and trustees, but had not as yet provided for putting anything into their hands to take care of. He was unwilling to permit any treasurer to be obliged to advance to the association. He had heard gentlemen speak of the sinews of war, but he felt convinced that the war would be of only a moral character; he felt the more certain of this from seeing the perfect unanimity which had prevailed at all their meetings, as well as in all the councils of the committee of their association. He considered that the cause of medical reform had made much progress, and especially since the change in the Administration. The Institute had now friends in the Administration, and he felt they would not be treated with the coquetry to which they had hitherto been subjected. He could only recommend to the members of the Institute, that they should act so as to enable the council to enforce their position. He then read the resolution as follows:—

Resolution 4.—"That the annual contribution by the members of the Institute be fixed at one guinea, payable in advance, the payments to date from the 1st day of August in each year; and that no member be entitled to vote for the council without having paid his subscription."

Mr. Sutton, in seconding the resolution, had only one observation to make—it was, that as the subscription was so small, he felt convinced all would be prompt in their payment.

The resolution was then put from the chair, and carried unanimously.

Mr. Bonney said that the resolution which had been confided to him put the keystone to the formation of the Institute. It had been arranged that polling papers should be sent out, and it only remained for them to consider the time necessary, after the return of those papers, before an announcement could be made concerning the members of the council of the new Institute. The time suggested in the resolution which he would read was ten days.

Resolution 5.—"That the special committee for conducting the election be requested to advertise the result of the election within ten days after the date specified for the return of the polling papers, with a list of the officers of the National Institute, and to call a meeting of the council at as early a day as possible."

It was of the utmost importance that the members should be careful in expressing their approbation or disapprobation of different gentlemen as members of the council of the Institute. He hoped that their body would be the reverse of the existing colleges; he hoped that their council would, unlike those of the existing colleges, prove an honour to their institution.

Mr. Norton seconded the resolution, which was put, and carried unanimously.

Mr. Clifton thought the resolution he held in his hand, and which he would read to the meeting, one of the most important of the evening; it was to charge the council about to be appointed with one of their most important duties.

Resolution 6.—"That it be the duty of the first council to proceed with the enrolment; and, after the appointment of the necessary stipendiary officers, to draw up a code of by-laws, and to submit them to a future general meeting of the members of the Institute for approval; and to carry out the objects of the National Institute and of the National Association, as agreed upon at the public meeting, held at the Hanover-square Rooms, on the 17th of April, 1846, and recorded in the transactions bearing date the 1st of May, 1846."

He had no hesitation in saying, that from the manner in which the first council carry out their important duties would depend much of the success of the institution they were met to form and to concentrate. It had been a matter of much regret to him that for years general practitioners had not met with the consideration to which their education and attainments entitled them. He thought, probably, that if they had been less fitted for their position, they would have been better treated by the bodies who have arrogated to themselves an extended education and a higher position, or greater skill. For the future, general practitioners would look to their own Institute for their *status*. He believed the Institute would grow, under careful management, to be the highest in the kingdom; but, at the same time, he must warn the members not to expect too much at once. He believed the wisest course the council could take would be, at first to feel their way by degrees and carefully; but he knew that, from the unanimity which had always prevailed in their councils, the foundation they had laid would redound to the credit of the profession throughout the kingdom. By the resolution the gentlemen present would perceive that the council would be charged with the preparation of by-laws, to be submitted at a future meeting for the approval of the members.

Mr. Fuller, in seconding the resolution, said that individual members must not be contented with putting their own shoulders to the wheel. They must also endeavour to induce their medical friends to come forward to join the Institute.

Resolution put, and carried unanimously.

Mr. Joseph approved highly of every resolution which had been proposed that evening; he concurred too in the remark, that the present Government was much more likely to assist in carrying out the views of the mass of the profession than the former one. A committee had been formed to carry out the election of members of the council of the Institute. He wished to know how that election was to be decided, and how and by whom the scrutiny was to be conducted?

Mr. Bird said he thought there could be no difficulty in adopting a step which would be quite satis-

factory to the members. He suggested that the gentlemen present should appoint the scrutineers. He thought the committee were not called upon at that stage of the proceedings to explain more fully than had been done already the plan on which they proposed to conduct the election; but he thought that, if the members of the Institute had sufficient confidence in their committee to allow them to send out balloting papers, they would also have sufficient confidence to allow them to make public the result of the election. Mr. Bird then suggested that Mr. Joseph should propose three gentlemen to act as scrutineers.

Mr. Joseph then proposed a resolution to the effect that three scrutineers should be appointed.

Mr. Dermott, as an old reformer, begged to second the resolution.

Mr. Dowling said that, perhaps, it would be satisfactory to the meeting to know that the matter had been already considered by the committee, but that that body had thought it better to leave it to the members at the meeting to make any proposition on the subject. He would call on Mr. Joseph to name three scrutineers at once.

Mr. Bonney suggested that the gentlemen named should all be present at the meeting, in order that their consent might be obtained.

Mr. Brown suggested that the mover and seconder should form two and agree on a third.

Mr. Joseph would be happy to act, and would name as a third Mr. Robins.

Mr. Dermott regretted, that from the duties which would devolve on him at the commencement of the session, it would be impossible for him to give as much time to the scrutiny as it would require. Mr. Copley would act in Mr. Dermott's place.

Mr. Joseph, Mr. Robins, and Mr. Copley were then appointed scrutineers.

After a vote of thanks to the President, and the expression of the gratitude of the members of the Institute to the late Honorary Secretaries, Messrs. Bird and Ancell, which the latter gentleman acknowledged with much feeling, the meeting separated.

The utmost good feeling and harmony prevailed throughout the proceedings, and we noticed at the close of the meeting, that numerous gentlemen came forward and tendered their subscriptions.

TREATMENT OF FRACTURES OF THE CLAVICLE.

To Sir WM. BURNETT, M.D., K.C.H., &c.

SIR,—In conformity with your wish for me to report upon the new apparatus for fractured clavicle* of James Ellis, Esq., surgeon of her Majesty's navy, when an opportunity presented for testing its efficiency, I beg now to say that such an opportunity has occurred by a case from her Majesty's steam vessel Ardent, sent hither for cure on 16th of May last, and that it has succeeded perfectly, the union of the bone presenting not the slightest degree of irregularity.

Upon his admission there was the usual deformity, on which the common bandage and compression applied on board had produced no perceptible effect in retaining the fractured surfaces in apposition. Upon the application of Mr. Ellis's apparatus, I ordered the patient to bed, on account of the frequent carelessness of soldiers and sailors when allowed to walk about, even in the ward. On the 9th of May I permitted him to rise, and, in proof of my previous precaution not being unnecessary, found on the following morning the ends of the bone riding about as badly as at first. He was again ordered to bed, and kept there for something more than a fortnight, when the apparatus was removed, the union being firm, and having been so many days before; but, from what had previously happened, I deemed it proper to be more careful than could be necessary with a more considerate class of patients.

From close observation of this case, I am induced to think most favourably of the invention; and when we consider the frequent slur thrown upon surgical skill, for irregular union in fractures of this bone, and the particular necessity for guarding against its occurrence in women, whose dress so much more displays any deformity from such an accident, I think its use may be safely recommended to the profession. Confinement to bed for patients in civil life is by no means necessary: moderate care, a loose dress, and quiet ride for the first fortnight, seem to be all that is required. I have the honour to be, Sir,

Your most obedient servant,
JAMES PRIOR,
Deputy Inspector of Hospitals.

Royal Marine Hospital, Woolwich, July 6.

* A woodcut representing this apparatus—a useful modification of Desault's principle—will be found in a former number of the present volume.

GOSSIP OF THE WEEK.

MORTALITY ON BOARD AN EMIGRANT SHIP.—The following melancholy intelligence has been received at Lloyd's:—"Quebec, August 6.—The barque *Elizabeth and Sarah Simpson*, bound from Killala, with passengers, has arrived off the Basque Islands, and has reported a great number of the passengers, as well as the commander, dead, a contagious fever having broken out on board about a week or ten days after the ship quitted Killala. There were sixteen other cases of fever, said to have been brought on by bad water and the filthy state of the vessel." The *Quebec Mercury* of the 8th of August confirms the above. It states that the vessel had been eight weeks on her passage from Killala, that forty-two had died on the passage, and that the captain and two more passengers had expired since her arrival at Basque Islands.

ON THE TREATMENT OF OLD VENEREAL ULCERS.—The treatment adopted by M. Velpeau in these cases is simply to touch the purulent surfaces very carefully with the acid nitrate of mercury, which, he says, appears to act as a specific, both as a caustic and as a mercurial compound. He has tried other caustics, but has not found them to act with the same degree of efficacy against this affection, and is, therefore, of opinion that we ought not to hesitate to employ this treatment wherever we meet with indolent, excavated ulcers with equivocal characters, even when the previous existence of syphilis has not been detected—ulcers of this description being, according to him, almost always cured by it. He relates the case of a man who had thirty ulcers, of all sizes, and who had been under treatment for eighteen months without any amelioration. These ulcers were excavated, of a dirty grey colour, and had all the characters of venereal sores, they were merely touched once with the caustic, and in twenty days nineteen-twentieths of them were healed. "It is true, however," says M. Velpeau, "that the protoiodide of mercury was given internally (which ought to be done), in conjunction with a saline mixture and a few baths, but nevertheless it was a very satisfactory result."

ANTIDOTE TO PRUSSIC ACID.—M. Larocque has been lately engaged in performing some experiments with a view of testing the practical efficacy of the mixed oxides of iron as an antidote for prussic acid. He has arrived at the following conclusions:—1. That the alleged antidote has no effect whatever when prussic acid has been taken in the anhydrous state. The rapidity with which this poison causes death is too great. 2. The same objection applies to its use when the anhydrous acid has been swallowed diluted with its volume of water. 3. That good effects may follow its use when it is employed at the commencement of symptoms, and the dose of the medicinal acid is about from sixteen to twenty-five grains. 4. That when the medicinal acid is diluted with a large quantity of water, there is in most cases great hope of recovery. 5. That chlorine increases the efficacy of the antidote.—*Gaz. Med de Paris.*

"The science of magnetism is scarcely in its cradle, if one may call by the name of science a theory without principles or laws, a bunch of physics, the objects of which escape the senses, which communicates itself, and operates in a marvellous and inconceivable manner, and in which all is miraculous; or rather, if one may call 'science' a collection of facts, of observations without end and without connection; a tissue of erroneous opinions and ridiculous hypotheses." The above is the opinion on magnetism contained in a memoir on medical electricity, to which a prize was decreed by the Academy of Rouen. This memoir was published in Paris in 1785; and who was its author? Marat! In reading this work, who would believe that eight years afterwards a learned physician would lay aside his mask of man, to show only the demagogue, the wild beast wallowing in blood and mire?—*Gazette Medicale de Paris.*

HOSPITAL STAFF.—William Donneland Marchant, gent., to be Assist.-Surg. to the Forces.

The cholera still rages at Scinde. On the 15th, 16th, and 17th days of June, 255 Europeans died of the epidemic.

The disease among cattle has broken out afresh in Poland to such an extent that the exportation of cattle has been prohibited.

The accounts from the different parts of France all agree in stating that the reports respecting the potato disease have been greatly exaggerated. In a few localities signs of the disease which attacked the crop last year have reappeared; but it is ascertained that the disease has only attacked certain species of the vegetable.

M. Kuss has been recently elected by *concours*, after a severe contest, Professor of Physiology at the University of Strasbourg. MM. Serive, Lerchoullet, Strohl, and Michel were also candidates.

The Sultan is at present travelling, and wherever he goes he has all the children, both Christians and Turks, vaccinated.

OBITUARY.—We regret to have to record the death of Percy Earl, Esq., the naturalist, who was drowned in the Torres Straits, in the month of May last. Suddenly, Mr. James Knox, many years resident medical officer of the Barnstaple Infirmary. On Thursday, the 27th ult., aged 21, Baker-street, Portman-square, Thomas Jackson, Esq., late Surgeon of the 14th Regiment, after a long and protracted illness, aged 80.—At Port of Spain, Island of Trinidad, West Indies, 16th ultimo, Stephen L. Carmichael, M.D.—At Bridge of Allan, 21st ultimo, Mr. Alexander Miller, of 32, Buccleuch-place, Edinburgh, Fellow of the Royal College of Surgeons.

MORTALITY TABLE.

For the Week ending Saturday, Sept. 12, 1846.

Causes of Death.	Total.	5 Sum-	Average of 5 years.
ALL CAUSES	884	898	968
SPECIFIED CAUSES	881	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	209	201	188
SPORADIC DISEASES.			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	87	99	104
Diseases of the Brain, Spinal Marrow, Nerves, and Senses..........	151	155	157
Diseases of the Lungs, and of the other Organs of Respiration	204	227	294
Diseases of the Heart and Blood vessels	20	23	
Diseases of the Stomach, Liver, and other organs of Digestion	112	87	72
Diseases of the Kidneys, &c.	6	6	7
Childbirth, Diseases of the Uterus, &c.	12	9	10
Rheumatism, Diseases of the Bones, Joints, &c.	11	0	
Diseases of the Skin, Cellular Tissue, &c.		1	
Old Age	33	52	67
Violence, Privation, Cold, and Intemperance		26	26

No. 364. **SUMMARY.** SEPT. 19

PROGRESS OF MEDICAL SCIENCE,

INCLUDING CHEMISTRY AND PHARMACY.

France.

ACADEMY OF SCIENCES.

Meeting of Sept. 7; M. MATHIEU in the Chair.

EXPERIMENTAL PHYSIOLOGY.—THE HUMAN VOICE, BY DR. BLANDET.—Muller endeavoured to ascertain the exact mechanism of the human voice by experiments conducted on the following plan:—The arytenoid cartilages being fixed upon a board, the tension or relaxation of the vocal chords was obtained by an increase or a diminution of the strength of a stream of air blown through the larynx; but the experimentalist deprived the instrument of its natural vibrations by the inflexible nature of its support. Dr. Blandet proceeds upon quite a different principle. Rejecting all comparison of the human larynx, with a bird-call, a reed, or any instrument whatever, he attempts to supply the absence of muscular contractions with another power, giving in the first place a solid fulcrum to the thyroid cartilage. To replace the action of the sterno-thyroideus and hyoideus muscles, he obtains by pressure on the basis of the arytenoid cartilages an effect similar to that occasioned during life by contraction of the thyro-arytenoideus muscle. A stream of air forced at the same time through the glottis gives rise to acute sounds, the vocal chords being, by this process, permitted to vibrate only in their anterior portion. The action of the crico-arytenoideus lateralis, by which the glottis is partly relaxed, can readily be imitated by raising with the finger the inferior margin of the arytenoid cartilage: in this state medium tones can be produced; lower tones are obtained when the crico-thyroideus drags forward the thyroid cartilage—a condition easily established by pressure with a finger; the lowest notes result from imitation with the hand, of the action of the crico-arytenoideus posticus. It is interesting to remark that the sounds issuing from the larynx in the dead subject are stronger and more natural during artificial inspiration than during expiration; the peculiar sound of the voice of the deceased is perfectly reproduced.

DISEASES SPECIAL TO PAPER-STAINERS, BY A. CHEVALLIER, Member of the Academy of Medicine, &c.—Workmen engaged in the preparation of arsenite of copper, and paper-stainers who use it in their trade, are exposed, from the action of the poison, to a papular eruption of the skin; to a remarkable anasarca of the face, bust, and scrotum; and to severe abdominal colic. M. Chevallier has attentively studied these symptoms, which are, it is true, not very common, on account of the very small number of persons occupied in that branch of the trade, and recommends the adoption of the following measures as calculated to preserve the men from the effects of the poison:—1st, large and well-ventilated rooms; 2nd, gloves for the protection of the hands during solution of the arsenious acid; 3rd, frequent lotions and sulphurous baths; 4th, the internal administration of the sesqui-oxide of iron.

THE ERGOT OF RYE—DR. PAROLLA.—Dr. Wright showed, in 1837, that the ethereal oil of ergot, at the dose of thirty drops, is as powerful as ʒj. of the powdered secale cornutum: in this Dr. Parolla fully agrees with Dr. Wright; but from the oil he has separated, by the assistance of alcohol, a resin which he conceives to be the real active principle of the drug, and which enjoys a powerfully-sedative action. According to the author, this resin might replace most antiphlogistic measures; at doses of six to eight grains daily, he has found it efficient in pneumonia, typhus, and uterine hemorrhage. And so enthusiastic is Dr. Parolla in the cause of the resin that he conceives it to be capable of curing pulmonary consumption; a case of *complete cure*, he brought before the Scientific Congress at Florence, *with the anatomical preparation* · a proof of a rather unsatisfactory sort of recovery. Dr. Parolla states that the ergot is not a cryptogamic formation, but a morbid secretion of the diseased grain.

ORGANIC CHEMISTRY.—M. Payen asserted some years since, that fecula contains an essential oil, to which is due its special odour, and which can be extracted by the action of pure spirit. Many chemists, and among others Professor Liebig, attributed the formation of this oil to alcoholic fermentation; Liebig further considered the presence of a fibrinous, putrescible substance in the pulp necessary to the special fermentation which generates the oil, and added that when, instead of acting on boiled tubers, fecula was saccharified by the action of sulphuric acid, the essential oil was no longer produced. M. Payen having repeated this experiment, and again obtained the oil, concludes that his former view was correct, and that the objection made to his statements must in consequence fall to the ground. He thinks that, by the same method of operation which he has employed, the peculiar aroma of wines, spirits, &c., can also be separated.

STRUCTURE OF THE LIVER.—An important anatomical memoir was read on this subject by Dr. N. Guillot. The microscopic researches of that anatomist fully confirm Mr. Kiernan's views. Mr. Kiernan had not succeeded in seeing the anastomosis of the smallest biliary divisions, and his injections were always made on the liver of the cat or pig. Dr. Guillot has successfully injected the human liver in its healthy and in its diseased states, and in numerous anatomical preparations and designs, clearly demonstrates the intimate structure of the viscus. We will in our next communication forward to the readers of the *Medical Times* an analysis of his memoir.

ACADEMY OF MEDICINE.

Meeting of Sept. 8; M. ROCHE in the Chair.

M. Huguier read a paper on the diseases of the sebaceous follicles of the organs of generation in women. The most striking part of this memoir referred to hypertrophy of the follicles, which, becoming inverted in consequence of the progress of acute or chronic inflammation, present the appearance of the syphilitic mucous tubercle, for which they are often mistaken. This affection can be removed only by a surgical operation; M. Huguier's researches led him to inquire more closely into the structure of these organs, and to find that sebaceous glands are not merely bags with a narrow orifice, but perfect glandular bodies lying in the structure of the dermis, on the surface of which they terminate by an excretory duct.

On a former occasion (see *Medical Times*, vol. xiii., p. 2) Dr. Huguier presented anatomical and physiological details on the vagino-vulvular glands. Having now completed his researches, he laid before the Academy an account of its diseases. These organs are frequently the seat of acute inflammation, the consequence of venereal indulgence; abscesses of the glands have been generally confounded with phlegmonous inflammations, pre-recto-vulvular and stercoro-vulvular abscess; from the latter they can be readily distinguished by the dark colour of the pus, its fetid odour, the possibility of the suppuration ulcerating the rectum, and the formation of a cylindrical cord by which the cicatrix of the labia is attached to the intestine after the cure.

HYSTERIA, BY DR. GENDRIN, Physician of the Hôpital de la Pitié.—In a letter addressed to the President of the Academy, M. Gendrin brings forward the following opinions on the nature, symptoms, and treatment of hysteria:—1. Hysteria does not merely consist in intermittent spasmodic attacks: it is a continuous malady which presents always characteristic symptoms in the intervals of the convulsive fits. 2. In all cases, without exception, from the beginning of the disorder to its termination, a general or partial loss of sensation may be observed; when the disease is mild in its form, anesthesia occupies only limited regions of the skin; when it is severe, on the contrary, it occupies the entire cutaneous surface, and the mucous membranes accessible to our means of exploration, such as the conjunctiva, the pituitary surface, the buccal mucous membrane, the rectum, urethra, vagina, and urinary bladder. It is not very uncommon to meet with this anesthesia in the organs of special sensation, and in deep-seated parts. Some patients lose the consciousness of the acts of locomotion and of the position of their limbs. 3. The degrees of anesthesia and of the violence of the fits do not bear any proportion to each other. 4. Most patients thus affected present in various regions, at least during the presence of the convulsive fits, a degree of pain, which is in general the proximate cause of the attack, and which furnishes the physician with a valuable practical indication. 5. In hysteria, paralysis, with flaccidity or contraction of the affected part, is a very frequent symptom which has often caused error of diagnosis, and which may last without peril for months, even when it occupies the bladder, rectum, or limbs. 6. It is a mistake to consider the sensation of the globus hystericus and asthma as phenomena constantly attendant upon hysteria. Two other forms of attack are very common or alternate with dyspnœa; Dr. Gendrin refers to paroxysms of ecstasy or mania. 7. All the apparently

marvellous peculiarities of animal magnetism may be spontaneously produced in hysteria. Thus, the insensibility which permits operations to be performed without pain exists in all the forms of the disease. In ecstatic hysteria it is observed in its highest degree. 8. The anomalies of enervation in hysterical subjects show themselves in the immediate action of medicines. Thus, patients who have no increased excitement of the digestive organs can take 12, 15, or 20 grains of opium without experiencing any narcotic results. If the stomach is in an irritated condition, the opium is rejected and no narcotism is observed. A few cases, not sufficiently numerous, however, to permit Dr. Gendrin to draw from them any positive conclusions, lead him to believe that in hysteria large doses of hyosciamus and of belladonna may be exhibited with impunity. 9. The most efficient drug in the treatment of hysteria is opium. The doses should be at first 6 grains daily, and be carried to 10 or 15 grains in the 24 hours. When a narcotic effect has been obtained, all the hysterical symptoms are observed to decrease, and the medicine should undergo a daily diminution. 10. Sulphuric ether, in doses of ℥ss., ʒvj., or ℥j. daily, is also very useful; but its beneficial action is not produced unless the patient takes these enormous quantities; no accident ever results from them.

A New Plan of Treatment of Urinary Calculi. By Dr. Dumesnil, late Interne of Hospitals, &c.

The extremely painful alternative of performing lithotomy, or of crushing the stone with lithotritic instruments, has, no doubt, long since suggested to many surgeons the idea of destroying calculus by the use of solvents; but the problem is so complex, the difficulties of execution so great, that all hope of obtaining that desirable result has been in some measure abandoned. The variable composition of calculi, the danger of placing irritating substances in contact with the lining membrane of the bladder, and the inanity of the researches previously made to attain the object, are fully set forth in Dr. Prout's excellent work ("Stomach and Urinary Diseases," p. 457). Dr. Dumesnil has not, however, been deterred by the failure of his predecessors, and in a communication replete with interest, which he has lately forwarded to the Academy of Medicine, proposes a new mode of treatment, of which we will endeavour to give a rapid description.

For the sake of lucidity, we may divide into three sections the memoir before us:—1. Composition of calculi; diagnosis of their nature. 2. Action of solvents upon them. 3. Possibility of dissolving the urinary concretions in the bladder without injury to its parietes.

Section 1.—For practical purposes calculi may be divided into three varieties,—lithic, phosphatic, and oxalic,—the two latter being most usually combined with alkalis; the former, on the contrary, remaining very frequently in its pure acid condition; hence the conclusion may be immediately drawn, that one solvent cannot possibly answer in all cases, but, as Dr. Prout very justly remarks, the substances which might act upon one set of concretions in such a manner as to disaggregate them, would, in all probability, have a contrary effect upon another series. It is, therefore, of indispensable necessity to recognise the *nature* of the stone before any operation be instituted; for this purpose the analysis of the patient's urine furnishes only very uncertain data; nor does its changeable appearance give the surgeon anything like positive information. Dr. Dumesnil seeks for the required knowledge by the application of Fourcroy's method, with the assistance of an instrument of which we will endeavour to give a description in the 3rd section. He places very dilated sulphuric acid in contact with the stone, and forms his opinion of the nature of the calculus by the examination of the liquid which returns: if it contain sulphate of lime, the calculus is a phosphate or an oxalate, and will yield to acids; if it contain no lime, it is most probably formed of uric acid, and can be dissolved only by alkalis. This plan of diagnosis does not, of course, exclude the study of functional disorder, nor authorize the surgeon to neglect the information to be gathered from the use of the catheter. The great object is to introduce without danger the acid solution, and that object Dr. Dumesnil seems to have attained.

Section 2.—When a fragment of phosphate of lime is placed in contact with muriatic or nitric acid, it is immediately dissolved; but a *calculus* of phosphate is not disaggregated by the action of these acids, because they have no power on the organic cement by which the elements of the stone are connected. This cement is readily dissolved in sulphuric acid, which also enjoys the advantage of forming soluble compounds with ammonia and magnesia. Muriatic acid, however, also destroys very rapidly the organic part of the concretion, and M. Dumesnil employs them both in equal quantities,—of each half a drachm to three ounces of distilled water at 40°. The agitation of the fluid adds considerably to its power.

Alkaline solutions are to lithic calculi what acids are to oxalates and phosphates. Gay-Lussac and Pelouze, Scheele and Prout, have given to alkaline carbonates a fair trial, and have recognised their complete inefficacy. Borax has appeared to Dr. Dumesnil to be a little more powerful; but a solution of two per cent. of potass in distilled water is the fluid which he has found most rapidly active: at 20° the alkaline solution dissolves the stone as well and as speedily as at 40°—a circumstance which may be, perhaps, explained by the ready formation of carbonates under the influence of heat. From his numerous experiments, Dr. Dumesnil thinks himself authorized to conclude that in seven or eight hours the largest phosphatic calculi may, by this method, be dissolved in the bladder; he is inclined to say the same of uric acid concretions; but oxalate of lime communicates to the stones of the other form a degree of density which would render a longer period necessary for their complete destruction.

Section 3.—The membrane which M. Dumesnil employs for the purpose of isolating the stone in the bladder consists of a piece of intestine, greased on both its surfaces to prevent exudation and exosmosis of the solvents through its parietes. The bag is introduced by means of a straight catheter, very slightly bent at its extremity, and is opened and closed with a steel spring. In manipulations repeated numberless times on the dead subject, the calculus was easily seized and thrown out of the sac; through the tube of the catheter the solvents were injected, and a continuous double stream was established. By numerous experiments the author proves that the acid or alkaline fluids, diluted, cannot by any means perforate the sac so as to come into contact with the walls of the bladder. The injection is continued for an hour and a half or two hours, according to the condition of the patient, and is repeated until the complete destruction of the stone has been obtained, or until the diminution of its size permits its extraction through the urethra. Such is the new method proposed by Dr. Dumesnil; and when it is recollected that lithotomy is one of the severest operations practised on the human frame,—that lithotrity is applicable only to chosen cases, in which the bladder is healthy, the stone small and friable, and that even with these favourable circumstances it is always attended with much pain, and not unfrequently with considerable danger,—it will be readily admitted that all efforts directed towards the laudable end of rendering these operations unnecessary are deserving of encouragement. The method proposed by Dr. Dumesnil, which he calls lithomenia (from λιθος, a stone, and υμην, a membrane), is undoubtedly imperfect in many of its details; but it is, to say the least, an ingenious application, and will, we trust, induce others to turn their attention towards the same subject.

Cæsarean Operation.—("Gazette Med. de Strasbourg.")—Dr. Sclater was called on the 15th of January, 1846, to the assistance of a deformed woman, aged 31, who had already been twelve hours in labour. The patient was primiparous, and not more than 1 m. 30c. (4 feet) in height. The pelvis was extremely oblique, the sacrum depressed, and the right crista ilii one inch higher than the corresponding part on the left side; the uterus was, besides, in a marked state of anteversion. On examination per vaginam, the ischia were found to be separated from each other only by an interval of four or five centimètres; and this was also the extent of the antero-posterior diameter of the brim. The waters had been discharged; the orifice was turned backwards, and dilated to the size of a crown piece. The pains succeeded each other at short intervals. Dr. Steinbrenner having been called in by Dr. Sclater, the operation of hysterotomy was agreed upon, and an incision fifteen inches in length was performed on the linea alba, one half above, the other half below, the umbilicus, and a second section having divided the peritoneum and aponeurosis, the uterus was cautiously incised and the placenta uncovered. The index and medius fingers of the left hand were then introduced, and the placenta detached in its superior part. The wound of the uterus was increased to the extent of the incision of the skin; the feet of the child were seized, and delivery performed without any further obstacle. Between the extraction of the infant and the removal of the placenta, a large quantity of blood was lost, but the hemorrhage was suddenly arrested by delivery, and, the uterus returning rapidly to its natural size, the greatest difficulty was experienced to maintain the intestines in the abdominal cavity. The wound was closed with six quilled sutures. The child was alive, well formed, and strong; one application of leeches on the abdomen was necessary, but the recovery was complete six weeks after the operation.

Digestion in 1846.—(From the "Journal de Médecine.")—At last the phenomena of digestion are enlightened: digestion is no more to be considered a simple but a complex function. There are as many digestions as organs. First, the stomach, by which animal food is dissolved; it is in carnivorous animals almost the only intestine, and they require no other; their digestion is gastric; it is intestinal in herbivorous tribes. After the incisors and cuspidati come the molares: in the same manner after the carnivorous intestine we find the intestines which digest grains and vegetables masticated by the molares. In the small intestine feculent substances are absorbed and saccharified—a fact proved by a simple experiment; fecula taken in the stomach immediately above the pylorus will become blue when placed in contact with iodine, and will, on the contrary, not change colour after its passage through the pyloric orifice. It is this, the principal phenomenon of digestion in the duodenum, which has led to the discovery of the saccharifying power of the pancreatic secretion. Hence not only a change in the theory of digestion, but in the pathology of diabetes; we can no longer admit that the kidneys secrete sugar, but that they allow the passage of the saccharine matter contained in the blood.

All these discoveries are in themselves important scientific acquisitions; but their importance is doubled when their practical consequences are reflected upon. The whole history of gastralgia, *rudis indigestaque moles*, must begin anew. No theories can be compared to the recent discovery of the following facts. Eat meat, the urine becomes acid; eat vegetables, it immediately becomes alkaline.

The gastric juice is a powerful acid, which readily gives birth by fermentation to gaseous products. In dyspepsia it is therefore a mistaken practice to recommend the use of alkaline salts, by which the digestion of animal food is retarded. The corrosive nature of the fluid accounts for gastric pain, pyrosis, &c., most probably the result of its contact with dry portions of the mucous membranes. By fermentation in the stomach, foul breath and flatulency will be produced; alkaline medicines will be of no avail, but mild laxatives are fully indicated. The digestive power of the gastric juice varies with its heat; below 10 deg. and above 55 deg., that power diminishes, and is completely lost beyond 50 deg. It is therefore not proper to eat very hot substances.

The stomach being the organ in which animal food is dissolved, meat should not be given in gastric affections; whereas feculent substances, digested in the jejunum, can be safely permitted.

Dan. M'Carthy, D.M.P.

PRACTICAL REMARKS ON FISSURES OF THE ANUS, AND THEIR TREATMENT.—M. Thiry has published in the "Journal of Medicine, Surgery, and Pharmacology of Brussels," a paper on the above subject. The following are the chief facts which the author has brought forward:—Uncomplicated fissures of the anus are kept up by a diminution of the contractility of the muscular fibres of the middle portion of the rectum which becomes excessively dilated, the fibres not having sufficient contractile power to expel the fæces, and to overcome the resistance opposed to their passage by a spasmodic contraction of the sphincter. This spasmodic contraction does not, therefore, according to M. Thiry, deserve the consideration which has been hitherto paid to it. Means should not be applied to remedy this contraction unless it be of extreme activity, in which case it should be treated as a complication. Injections of an infusion of ratany appear, in the opinion of M. Thiry, to be the most prompt and efficacious remedy in the treatment of these fissures. As the injections cannot act unless the rectum be empty, and the fæces do not habitually distend it, it is necessary to precede and accompany their use by the administration of gentle purgatives, emollients, and a severe regimen. Hip-baths, cold, and sedatives should be used, in order to relieve the pain, itching, and severe spasms which accompany fissures of the anus. If the fissure arise from any local or constitutional disease, of course such must be removed. Fissures of the anus seem so inherent in the constitutions of some patients as to be quite incurable; sometimes, too, they seem to be salutary emunctories, established by nature for the relief of congestion. Operations in cases of anal fissure should, according to M. Thiry, be entirely abandoned. If, however, any case should be met with, in which the operation should appear necessary, it should be done by the method of subcutaneous section; under such circumstances, however, the author insists that the operation relieves only a single symptom, and produces no effect on the origin of the disease; it is therefore necessary to assist it by other appropriate measures. Cauterization, dilatation, alteratives, and narcotics affect only one or more symptoms of the disease, and not its chief cause. These remedies are, therefore, simple adjuvants, which may indeed be used, but which must at the same time be combined with more active treatment. An apparatus, invented by M. Cazenave, of Bordeaux, may, when used in combination with the injections of infusion of ratany, previously recommended, be of some service, by its preventing the fæcal matters from coming in contact with the surface of the fissure.

ON THE WATERS OF BAREGES IN THE TREATMENT OF GOUT.—Dr. Koene has published, in the same journal, some remarks on the treatment of rheumatic and gouty affections which are worthy of our attention. After premising that rheumatic and gouty affections, and the different chronic diseases of the skin are "the result of the efforts which this principal emunctory makes to throw off acids from the system, in order to leave in the blood and other fluids a free alcali, especially soda, capable of holding fibrine, albumen, and proteine in solution, Dr. Koene goes on to say, that by saturating these acids, and introducing into the economy a solvent for the principles capable of nourishing the tissues, the system may be brought back into a state of health. The aluminate of soda, administered in baths, possesses considerable power in the treatment of gout; but, while being absorbed through the skin, the soda, in this remedy, leaves the aluminic acid, which, by obstructing the pores, at length opposes the absorption of the remedy, at the same time that it prevents cutaneous transpiration. Such of the sudorific medicaments as, from their affinity to oxygen, are at the same time capable of neutralizing the acids in the system, appear more fitted to fulfil the indications required. Such are the sulphuretted alkalies which possess the power of arresting, up to a certain point, the formation of the uric and phosphoric acids, of destroying the animalcules and cryptogamic vegetations which are so frequently met with, and of removing from the skin all that this organ eliminates from the blood. The most used of these sulphuretted alkalies is the trisulphuret of potass; but this compound excites considerable irritation of the skin, and is unable to yield to the constitution the required alkali; it also gives off a very disagreeable smell, and deposits, by the action of acids, more or less sulphur, which, like the alum before mentioned, must obstruct the pores, though perhaps in a less degree. This sulphur, indeed, is absorbed after a time; but the absorption itself is a source of annoyance to the patient, as it forms in the skin during the process of absorption, even a long time after the bath has been taken, hydro-sulphuric acid, the smell of which is very disagreeable. The proto-sulphuret of soda possesses only one of these inconveniences—it is that of disengaging hydro-sulphuric acid also, but this inconvenience may be avoided by mixing it with a solution of carbonate of soda, which produces a bicarbonate, water, and sulphur.

ON A VARIETY OF MALIGNANT PUSTULE NOT HITHERTO DESCRIBED IN NOSOLOGICAL CLASSIFICATIONS.—Dr. Van Swygenhoven reports in the same journal a case illustrative of a variety of malignant pustule which is never communicated, either directly or indirectly, to man by animals affected with it. The following are the principal characteristics he assigns to it:—Its attacks are much the same as those of the ordinary malignant pustule, from which it differs only in possessing less intensity. The form of the pustule is almost always oval, and seldom exceeds the size of a grain of maize. Sometimes, however, it inclines to a rounded form. The vesicle is always larger than the gangrenous point; the serosity is rarely of a reddish colour, generally white, slightly saline, and does not excoriate the neighbouring parts. This serosity, introduced into another animal by inoculation, does not produce any similar or analogous affection. The neighbouring parts redden, and become inflamed and swollen; the swelling increases, and much exceeds in size the point in which it first commenced, without being accompanied by phlyctenæ or crepitation. The gangrenous eschar does not increase, and does not extend deeply. The general symptoms are never severe, and seldom exceed a slight degree of irritation. A crucial incision with a lancet often cuts the disease short, but the actual cautery is injurious, and the application of caustics must be had recourse to only with great caution. A strict diet, and local and general bleeding, reduce the symptoms rapidly. At the expiration of three or four days the eschar is detached, and after this the cure proceeds rapidly.

ORIGINAL LECTURES.

The Nature, Causes, and Treatment of Mental Diseases.

By M. PINEL, M.D., Member of the Academy of Medicine, formerly Physician to the Bicêtre and Salpêtrière Asylums, Author of the "Traité Medico-Philosophique sur l'Aliénation Mentale," "Médicine Clinique," "Nosographie Philosophique," &c. &c. Translated, with Notes illustrative of some important Doctrines in Physiology, Phrenology, and Moral Education.

BY DR. COSTELLO,

Principal of Wyke House Asylum, Editor of the Cyclopædia of Practical Surgery, &c.

PARALYTIC CEREBRITIS.

From my own minute investigations into the nature of general paralysis, I think that four principal alterations characterize this disease—the acute inflammatory state, the chronic, the state of atrophy, and that of hypertrophy of the brain. Whether these alterations, which represent almost the entire acute pathological anatomy of the brain, can be distinguished from each other during life, or whether we can diagnosticate with such certainty as to enable us to apply the proper treatment to each, are questions which futurity must determine; for the present we have only to remark that in the general course of paralytic cerebritis we see that the symptoms are always the same, with the exception of some varieties inevitable in their commencement, progress, and violence, and which depend on the predisposition of each individual. I do not, however, doubt that we shall be able to distinguish the peculiar symptoms of inflammatory atrophy and inflammatory hypertrophy, these two alterations being too opposite not to depend on characteristic phenomena. But, in the absence of more precise data, we must hold to rational indications and the results of experience.

A most important point in general paralysis is to be alive to its earliest symptoms, if we have the good fortune to be consulted in time, and to act at once with as much energy and decision as if the disease was fully declared, it is at this period in reality that we can hope for success. I have stated that after repeated trials the curative method that I found to answer best was, the daily application for several months together of cupping-glasses to the nucha, abstracting not more than a tablespoonful of blood at a time; this with a scrupulous perseverance. Internally, I prescribe a light infusion of arnica rendered palatable with syrup of chicory. Regimen constitutes an essential part of this treatment; it should be nutritive and slightly tonic. A debilitating regimen, and especially bloodletting, will visibly accelerate the fatal progress.

When the disease is more advanced, the great point is hygienic care, and watching that excoriations are not allowed to spread, which they will do from the incontinence of urine, if not prevented. At this period the patient, no longer able to stand, is confined to bed or to a *chaise percée* for several hours in the day. The most grievous complications of this unfortunate situation arise from his inability to retain his excrements, which are passing off continually, and with the offensive smell of which the person and clothes become impregnated. To obviate this a leather couch has been employed, provided with a leather tube for the escape of the fæces and urine; but this soon becomes infected with the smell, while its use becomes an excuse for less care. The best thing is to have the means of changing the linen, the bed, and the posture as frequently as the patient's wants require, and by constantly persisting in this plan of management the sores are prevented, or healed, even in hospitals where such ample facilities do not exist as in private establishments. At this period the therapeutic treatment presents general indications only; the two most important are to obviate obstinate costiveness, or colliquative diarrhœa; constipation becomes the cause of general reaction. I have seen several cases where death, preceded by symptoms of tympanitis, was caused by an accumulation of hardened black fæces, and which could not be moved by the most powerful drastics. The evacuations should be kept in a solid state by a careful appropriation of food and medicine.

A careless and over-buttered cookery will often cause diarrhœa, and if it be allowed to proceed unchecked, the patient is reduced to a state of marasm in a week, and soon dies.

As regards the eschars that form about the sacrum, their dressing requires particular care. These sores, which are regarded as gangrenous, are supposed to require stimulant dressings, powdered bark, Goulard's ointment, and camphorated spirit of wine. Such treatment is improper: these sores are active, from the irritation caused by the patient's posture, his urine, and perhaps neglect. Emollients are therefore the best adapted to procure cicatrization. The constant change of position would of itself be sufficient to cause the sore to heal, but this cannot be done without in turn exposing the trochanters, knees, and elbows to excoriation. (a) I have seen at the Salpetrière a woman with general paralysis who presented a remarkable phenomenon in this respect, although still young, and with the appearance of *embonpoint*, she lapsed suddenly into the third and last stage of this disease, and wherever her skin was touched, even slightly, a gangrenous eschar formed the next day. She died promptly, as if struck with a general decomposition.

Delirium Tremens, which is scarcely more than a variety of the most common forms of general para-

(a) I have now a patient under my care who has used a water-bed for the last two years. She was placed on it at first for extensive sores, which have thus been cured.—TRANS.

lysis produced by the abuse of ardent spirits, when slight, is cured by regimen alone When more serious and chronic, it presents the symptoms of this disease, and requires, in addition to the means of treatment mentioned, the use of opiates under various forms and doses

Serous Congestions in the Brain—Œdema of the Brain—Œdema of the brain, with compression or infiltration of its tissue, is not an unfrequent complication of mania; it comes on suddenly in persons predisposed to lymphatic diseases, and gives rise to the series of symptoms already described under the head of acute stupor of the insane Its therapeutic treatment deserves attention

In this serous exhalation the general effect of which is to cause cerebral compression, the indication is obvious to disencumber the brain through the operation of diuretics and revulsives, and, as the direct effect of the compression is to suspend or benumb the nervous action of the brain, we may, in this case only administer diuretics and drastics in doses larger than usual, and the more so as they will act only in high doses I have administered fifteen drops of croton oil without procuring more than an ordinary evacuation The ordinary dose would prove inert, and the same may be said of irritants to the skin, the general insensibility being such as to require the most energetic irritants, and it is only when the patients recover in some degree that they begin to feel the pain of operations that had been practised on them weeks before, the sensibility and intellect then revive, and the pain of setons, moxas, or blisters becomes perceptible

Bloodletting increases the symptoms, doubtless, by favouring an increased serous exhalation, cold baths, and the applications of cold to the head, have not seemed to me to produce any good effect, but the *bain de surprise* might be employed effectively, as acting doubly, on the body as well as the mind, and producing a salutary commotion But as the disease is seldom dangerous, and as it consists merely in a brief suspension of the intellectual, sensitive, and motory functions, and as its duration may be abridged by diuretics and revulsives, it will be most prudent to limit our interference to these means

Acute and Chronic Hydrocephalus—As acute hydrocephalus, especially in very young children, presents in its progress all the symptoms of meningitis and encephalitis, of which it is often only the final one, it is necessary to employ all the means already recommended for the treatment of inflammatory congestion of the brain As regards the effusion itself, the treatment consists, like that of œdema, in the use of revulsives applied to the skin and derivatives to the intestinal canal, together with the exhibition of the most active diuretics Some caution may be necessary as regards purgatives in children, as in most of the acute cerebral affections there is an inflammatory complication of the gastro intestinal organs Tartar emetic given *en lavage*, or, according to the counter-stimulant plan of Rasori, if there be no disorder of the bowels may procure the absorption of the effusion, this was Laennec's plan Among the various diuretics the different preparations of squill and powder of digitalis, alone or in combination with calomel, may be advantageously employed. Local bleeding may be advisable when we have congestion of the brain or when a habitual hemorrhage has been suppressed If there should be any counter indication to their use internally, the strongest diuretics may be employed endermically. Some recommend dry aromatic fomentations, or plasters of soap and camphor, applied to the head In former times and even now, many recommend incisions caustics, nay, the actual cautery, the slow or prompt evacuation by means of an operation has also been recommended, but experience has shown that death has soon followed the sudden removal of the fluid

In chronic hydrocephalus, when all medicinal means have failed the perforation of the cranium has been frequently undertaken by anatomists and surgeons of eminence It is demonstrated that this evacuation causes death while, on the other and, the presence of the fluid becomes a habitual state, dangerous no doubt, but still compatible with the patient's continuing to live, and our art does not allow us to tamper knowingly with the lives of others. Gœlis's treatment is much extolled, although very complicated It consists of the use of calomel internally and of mercurial ointment externally The patient to wear a woollen cap, to use alkaline baths, and to open an issue, to be kept suppurating with carbonized antimonial ointment Inflammatory symptoms are combated with leeches, and the strength is kept up by combining the diuretics with tonics. According to this physician, calomel is the chief remedy, alone or in combination, it is proper in the first and second period, and may be given in the third as a palliative.

Irritant baths should be used, more particularly in chronic hydrocephalus, as their general action excites uniformly the organic activity over the entire surface of the body, and thus effects extensive revulsion The patient should live a good deal exposed to free air, but without being exposed too much to the sun

The preventive treatment of chronic hydrocephalus would be doubtless the best, if we could detect it in its incipient state but usually the disease exists before we are consulted We should, on the score of prevention—if we find cutaneous eruptions in children, oozings from the head, or the habitual formation of scales or crusts on the scalp—we should be cautious about meddling with them in any other way than by the administration internally of the mildest means and these only occasionally The intellectual education is also another important point of the preventive treatment Precocious children of lively reasoning, intellectual powers, are often urged forward by the vanity of parents or the speculation of their tutors this excitement, too great for the strength of the brain, and coinciding with the progress of development still going on in this organ, produces sanguineous or serous congestions that prove fatal and thus nips in the bud the most promising flower

Epilepsy—The principal hygienic indications, consisting of due surveillance and a proper shape of couch, have been already mentioned We have now to see, amongst the multitude of remedies that have been recommended in this disease, which are most worthy to be relied on

We may here repeat that it is only at the commencement of the epilepsy that treatment has any favourable chances of success, and we must act at the period as against an intermittent affection of the cerebral tissue Revulsives and derivatives, employed unsparingly, may determine a general shock, which may avert the disease When the epilepsy is confirmed, and the affection has deeply attacked the cerebral pulp art possesses but little resource, and we are forced to rely on empirical means only

In incurable epilepsy we have one certain fact, which is, that when the attacks are neither violent nor frequent the use of a new remedy always procures amendment, but it is of short duration I have found the belladonna to be one of the most effectual medicines of this kind, under its influence I have certainly seen the attacks become milder and fewer A cure has even been supposed to have taken place, when, after a considerable lapse of time, the disease has returned It should be given in the dose of one-fourth of a grain at first, increasing it successively to two or three grains It is often necessary to suspend it, owing to giddiness, illusions of sight, and vertigo We can readily imagine the effect of belladonna if we admit that the seat of epilepsy has anything to do with the optic tracts, but what can its action be, if the disease depend on an organic deformation in the nervous pulp, or a local induration?

Indigo, that has been so much extolled, has been tried at the Saltpetrière, without producing any other effect than dyeing the nails of the patients blue Carbonic acid and hydrocyanic acid, both dangerous remedies, have been also tried, resting on the physiological fact of their weakening the muscular energy, but without success, and the same may be said of ambergris The white oxide of antimony has also been spoken favourably of, but the tartarized antimony has been the most frequently employed in large doses, and again without success Nitrate of silver, which Biett used to employ at St Louis, has often given rise to the most formidable symptoms in the stomach. I opened, with Georget, the body of a person who died after undergoing this treatment during eighteen months, and we found the stomach corroded and pierced with holes in several places, and entirely denuded of mucous membrane towards the large extremity, and throughout the whole lower portion of the viscus.

Lombard has given this remedy with more caution, interrupting its administration from time to time, beginning by one-sixteenth of a grain, and augmenting to one-fourth of a grain, eight times in the twenty-four hours. This plan he tried in eleven cases, most of them experienced derangement of the digestive organs, in eight the violence of the attacks was diminished, and in one only did a cure seem to have been obtained It is, however, to be remarked that, given in these minute doses, and at intervals, the nitrate of silver did not cause that leaden colour of the skin which is sometimes found to occur after it has been too long employed. At best, however, it is like the others, but an empirical remedy, and extremely dangerous

Wormwood, digitalis, camphor, and castoreum have also been employed in vain Electricity, instead of doing good, has done harm by exciting still more the nervous system Tissot had a high opinion of musk and valerian, and the latter is the only remedy now in general use as a calmant, in powder, extract, or infusion

INSANITY IN GENERAL

I have already dwelt on the chief points in the treatment of acute maniacal delirium, and shall only here notice the views of therapeutic treatment propounded for insanity in the work of Sir William Ellis According to this author, we should, at the commencement of an attack, have recourse to bleeding proportioned to the strength of the patient he thinks this necessity still more urgent when the disease is complicated with congestion, in which case he recommends opening the temporal artery He acts at the same time vigorously on the bowels with strong doses of calomel and extract of colocynth, the head is shaved, and cold is applied morning and evening The patient is to drink night and day, barley or chicory water, in which a few grains of nitrate of potass or tartarized antimony are dissolved In the evening, sinapisms are to be applied to the soles of the feet, to be afterwards kept warm by being held over the hot steam of very hot water This course to be persevered in during several days If the general inflammatory action persist with the same violence, recourse should be had to local bleeding, by leeching and cupping, to the internal use of nitrate of potass and digitalis, the latter in small but long-continued doses, when given in very large doses, it sometimes produces, and suddenly such a prostration of strength that recovery becomes difficult.

If, from the first moment of the insanity, this perturbing treatment be persevered in, care being taken to adapt it to the strength of the patient, the cure may be rapid enough to admit of his being treated in his own house, provided the precaution be taken of employing servants that are strangers to him, and who will exact compliance with the directions of the physician The stomach is often weakened or irritated by this active treatment, and requires the exhibition of tonics with sedatives When the symptoms resist this treatment, the disease soon degenerates into confirmed insanity, from which the cure is often long deferred and doubtful.

In this second period of the disease, bloodletting must no longer be employed in quantity beyond what may be necessary to prevent serious cerebral mischief, the head may be shaved, and cupping employed on the scalp Dr. Ellis thinks he can discern the precise place for the application—the seat of pain and of greater heat We do not share in this opinion, nor do we think it so easy a matter to apply cupping-glasses to the scalp of an agitated maniac. In chronic mania he recommends, in addition to general means, the use of opium, combined with ipecacuanha, the extract of henbane, with digitalis and camphor, he particularly dwells on the attention that is to be given to the urinary and cutaneous secretions, both of which are to be stimulated by the use of nitrate of potass combined with tartarized antimony. The treatment here recommended has made some noise in France, and,

although it contains some instructions useful, especially as regards the commencement of insanity, it shows us very clearly the polypharmaceutic notions that still prevail in England in the treatment of affections of the nervous system.

But it is certain that our treatment in the beginning must be active, as any method of mere expectancy would be out of place as regards a disease which may for once be cured spontaneously, but in which, if neglected, relapse is inevitable; and it is on account of the liability to relapse that a very active treatment at first is chiefly to be insisted on.

A Course of Lectures on Diseases of the Skin.

By JAMES STARTIN, Esq., Surgeon to the London Cutaneous Institution.

LECTURE XXIV.

ROSEOLA, ERYTHEMA.

According to Willan and others.

GENUS.	SPECIES.
Roseola.	R. Æstiva. R. Autumnalis. R. Annulata. R. Infantilis. R. Variolosa. R. Vaccina. R. Miliaris.

As proposed by Startin.

GENUS AND SPECIES.	DIVISIONS	FORMS.
ROSEOLA R. Simplex R. ab Irritatione, vel Complicata.	Localis. Generalis.	Sparsa. Diffusa. Annulata. Acuta. Chronica

	SPECIES.
Erythema.	E. Fugax. E. Læve. E. Marginatum. E. Papulatum. E. Tuberculatum. E. Nodosum. E. Intertrigo.

As proposed by Startin.

		FORMS.
ERYTHEMA. E. Simplex. E. Excoriatum. E. Nodosum. E. Tuberculatum. E. Ulceratum.	Locale Generale.	Sparsum. Diffusum. Marginatum. Intertrigo. Chronicum.

GENTLEMEN,—A malady very closely allied, both in its nature, appearance, and attendant symptoms, to urticaria, is termed Roseola; it consists, like that disease, in a red efflorescence on the whole or any part of the body, without, however, any elevation of the patches above the surrounding skin, and with no appearance of wheals or obvious increase of density in the affected parts. By the common people it has been called bastard measles, or rose-rash, and various medical authorities have deemed it a true exanthematous fever; yet without sufficient reason, as it is undoubtedly witnessed in a chronic as well as acute form, which is never the case in the true exanthemata. The definition of this disease given by Willan, from which I shall not depart, is, "that it consists in a bright red or rose-coloured efflorescence variously figured, mostly circular or oval, without wheals or papulæ, occasionally fading and reviving: not contagious"; to which I would add, that it may appear on one part or extend to the whole body, its usual progress being from the limbs to the face and trunk.

This cutaneous disorder, like urticaria, which lately occupied our attention, exhibits the heat and redness common to diffused inflammation, which never advance to the effusive or suppurative stages, nor produce any of the abnormal products of those diseases of the skin previously described. It may occur in an idiopathic or symptomatic form, though the latter is by far its more frequent manifestation; thus it is in infantile febrile complaints, and particularly dentition (the *roseola infantilis* of Willan), that it is most frequently noticed; the greater tenuity and vascularity of the skin in young subjects being especially favourable to the development of the malady. It is not, however, confined to this period of life, but may attack mature or advanced age, and in these instances may more commonly be regarded as an idiopathic affection, constituting a true chronic disease of the skin. Roseola, however, would hold a very unimportant rank amid such affections in a practical point of view, as its nature, to use the words of an old author, "is rather a ludicrous spectacle than an ill symptom," were it not that the appearance of the eruption is apt to occasion its being confounded with scarlatina and measles, as well as with urticaria and erythema, the malady I have next to speak of.

Dermatologists, for the most part, have been content to adopt Willan's mode of considering this disease, assigning to it seven species or varieties, which I have only to recapitulate to convince you that no practical utility can attach to such minuteness of subdivision. The three first species are named *R. æstiva*, *R. autumnalis*, and *R. infantilis*, which are evidently the same affection modified by the season of the year, or by the age of the patient; the fourth is termed *R. annulata*, which is a mere form that may be assumed by any species of the disease; the fifth, sixth, and seventh on the list are designated *R. variolosa*, *R. vaccina*, *R. miliaris*, which, in fact, are but complications of the three first species with smallpox, cowpox, or miliary fever: the inflammatory action of which diseases in an irritable skin may give rise to roseola in any of its forms. This being my view of the subject, you may perceive by the chart that I propose to consider roseola under two species only, which I have named *R. simplex*, and *R. ab irritatione vel complicata*; two divisions, *localis* and *generalis*; and five forms or varieties, *sparsa*, *diffusa*, *annulata*, *acuta*, and *chronica*.

I shall now give you a brief description of these two species, which may manifest themselves in either of the divisions or in any of the forms I have indicated. *R. simplex*, which comprehends the three first species of Willan's arrangement, appears commonly in the form of scattered or diffuse red patches of irregular shapes, but mostly assuming a circular figure (sometimes so as to form rings or bands in a horseshoe form), which are not raised above the surrounding skin, and first show themselves on the limbs, suddenly or after a day or two of indisposition or febrile disorder; the summer and autumn being the seasons, and the youthful, or those whose skins are fair and vascular, being the subjects of its attacks. After a few hours the redness extends to the face and trunk, and it is sometimes so violent as to produce a general bright red tint all over the body, whilst the mouth, fauces, and throat may be at the same time invaded by the disease, constituting so great a resemblance to scarlatina that nothing but the previous history of the roseola can determine the distinction between the two affections—when the absence of a distinct fever, at least proportionate to the manifestations of the eruption, and the appearance, in the first instance, of the rash on the extremities (scarlatina primarily showing itself on the chest, face, and trunk), will determine the nature of the efflorescence. There is seldom much local irritation in roseola, unless indulgence in stimulants or improper food may give rise to it; nor is the disorder attended with constitutional symptoms beyond slight headache and restlessness, with more or less disorder of the digestive organs, all of which are usually relieved by the appearance of the eruption. The duration of this complaint varies from a few hours to a week, much irregularity existing in this respect, and exacerbations or renewals of the efflorescence being in such cases constantly observable. Some constitutions would appear to be particularly susceptible of roseola, so that the indulgence of the appetite with nearly any kind of food to a degree that slightly distends the stomach will produce it; of course the vegetable acids, wine, spices, and sweets or pastry, will be particularly obnoxious in such cases. The teething process, as must be familiar to all, is another very usual exciting cause of this rash (many infants manifesting more or less of it on cutting every tooth) which commonly subsides directly the gum has given exit to the cause of the irritation. In this, as in all other varieties of roseola, little or no desquamation of the cuticle is to be observed, which again is a distinctive circumstance, marking a difference between it and scarlatina or rubeola.

That variety of roseola to which Willan has given the name of *annulata* is the most likely to appear in a chronic form: it consists in the diffused rosy redness above described, assuming a circular or ring-like shape; indeed these roseolous flushings are almost protean in their nature—bands, horseshoes, stripes, crescents, &c., being observable, often in the same case, at different periods of the attacks of the disease. Amongst ladies of the *beau monde* this otherwise trivial malady constitutes a veritable torment, as the flutter and agitation of the fair one, in the performance of the toilet or in the anticipation of a fashionable *réunion*, is quite sufficient to bring forth the lurking blush, and as the face and neck offers the most vascular surfaces it is in these situations that the vagaries of the disorder are more annoying than hurtful to the fair votary, an indelible mark being imprinted for some hours on those charms which most meet the eye; thus, as it were, exhibiting an hieroglyphic intimation of the baneful effects of late hours and crowded apartments

Roseola ab irritatione vel complicata cannot be said to differ in any of its external manifestations from the simple species of the disease I have now described; it is the frequent accompaniment of many cutaneous eruptions; variola, vaccina, and miliaria have been especially cited by Willan as those maladies from the irritation of which it is most commonly witnessed. It is also often attendant upon rheumatism, gout, burns or scalds, or other excitements of the corporeal surface; yet under all these circumstances it presents the same unimportant and transient nature, constituting the first evidence of cutaneous inflammation, no effusion having taken place, and the mere pressure of the hand being sufficient for the moment to dissipate all signs of the disease.

I must mention, however, that in this species of roseola a degeneration into erythema, or œdema, to be presently noticed, will be most commonly found; indeed the resemblance between the complaint under consideration and erythema is such that authors have hesitated when describing them as separate maladies, which has been done only from a deference to the opinions of Willan, who so deservedly has exercised an undisputed sway over this department of medical science. I think, as I have said before, when speaking of lepra and psoriasis, of impetigo and eczema, of lichen and prurigo, of acne and sycosis, of ecthyma and rupia, and of other maladies of the skin separately considered, that a union of two or more under one common description and definition would be attended with useful results, theoretical as well as practical; and I am inclined to extend this observation to roseola, erythema, and perhaps œdema—the latter name not being applied by me as a synonymous term with anasarca, but to a peculiarly inflammatory state of the skin and subjacent cellular tissue, to be presently mentioned. With regard to the causes of roseola, it may be gathered from the remarks already made, as was said of urticaria, that they may be very commonly assigned, and are found to consist in errors of diet, in disorder of the digestive organs, or in the irritation of some other local disease; in a few instances, however, the affection would appear to be idiopathic, and then no reason can be adduced for its appearance. This is the case with an epidemic form of the complaint which now and then prevails in hot weather or during the fruit season; though in the latter instance gastric derangement, common at such periods from indulgence in food to which the stomach is unaccustomed, and the natural determination of blood to the skin owing to the high temperature of the atmosphere, may be regarded as the proximate causes in predisposed constitutions.

It must be obvious that the treatment required for roseola must be of the simplest kind; indeed the disease may be regarded as a salutary effort of nature, which in the majority of instances needs no medical interference.

In the acute forms the causes must be sought for and removed either by gentle aperients or

emetics, whilst a few drops of some mineral acid combined with the bitter of orange peel, or other stomachic, will be all that is necessary to restore tone to the digestive organs.

Where much pain attends, colchicum, or the iodide of potassium in small doses, will be found of much service, and the latter remedy has seldom disappointed me in the more chronic forms of the complaint; of course it may be variously combined to meet the exigencies of the case, and the vapour or tepid bath should be used as an auxiliary. The external means consist in spirit lotions containing a little borax or distilled vinegar, and eau de Cologne diluted with water in the proportions sanctioned by the custom of the patient, is the most usual domestic remedy, and commonly fulfils all the indications required. I have occasioned models of roseola to be prepared for your inspection, but I certainly shall not waste your time in the detail of cases of this evanescent affection, which is rare amongst the patients presenting themselves here for relief; indeed, I think that, contrary to what is observed of most cutaneous diseases, roseola may be said to occur ten times in the higher to once in the lower ranks of society; hence it is of some importance that a correct diagnosis should be formed of the disease, as a mistake, even upon so simple a subject, is always better avoided.

The constitutional disturbance attending the more important maladies with which it may be confounded—as, for instance, measles and scarlet fever—and the comparatively regular progress of the latter affections, connected with the previous history of the eruption, as I have already detailed, will seldom or never fail to furnish data preventing an erroneous conclusion. The difficulty of diagnosis is, however, considerably augmented when determining whether the patient may not be a sufferer from erythema in its early stages; but I should hope I have said enough to settle the diagnosis if ordinary attention be granted. Yet the models I hand round may serve better than any language to make you acquainted with the manifestations of the disease. You must, if you please, make a little allowance for the exuberance of colour in some of those recently prepared, as, were they kept in strict accordance with nature, they would be useless a twelvemonth hence.

Erythema was treated of, under the name of erysipelas, by Galen and Celsus; and it still retains this designation, amongst non-professional persons, in common with any other eruption which has heat, redness, and some degree of swelling, for its more prominent signs. By medical men, also, the term erythema is often applied under the same circumstances; as, for instance, to lichen, or to eczema in some of its forms, particularly that which is occasionally produced by mercury. I am sure I need not comment on the incorrectness of this mode of considering the disease, as no papules or vesicles are ever found, unless they exist in complications with other complaints to which they properly appertain. Erythema may be defined to consist in a non-contagious, circumscribed, bright-red, inflammatory eruption on the skin, of variable extent (which is slightly raised above the healthy parts, whilst more or less increased density of the affected portions is always observable), attended with heat, tingling, and burning pain, and sometimes with considerable pruritus. This state may terminate in cuticular desquamation, and disappear after a short period; or it may become chronic, and be accompanied by excoriations, ulcerations, and even gangrene.

It will be perceived, from this statement, that here are all the common products of simple inflammation, and, in fact, erythema may be regarded as the lowest type of true phlegmonous action in the human skin; it is a degree more violent than roseola, which may rather be compared to a permanent blush than a genuine inflammation, as there is no swelling consequent upon the effusion which so constantly marks the early stages of that phenomenon. Willan gave six species to erythema, and his followers have added others, of which the seven most important are thus named:—E. fugax, E. læve, E. marginatum, E. papulatum, E. tuberculatum, E. nodosum, and E. intertrigo; but I am disposed to refer the first on the list to roseola, and the second to œdema, of which I shall presently speak, whilst the others will be distributed, as I have written them on the chart, into five species, viz., *E. simplex*, simple papular erythema; *E. excoriatum*, abraded or excoriated erythema; *E. nodosum*, nodose erythema; *E. tuberculatum*, tubercular erythema; and *E. ulceratum*, ulcerated erythema. Each of these species may be local or general, or distributed into the five forms I have written as scattered, diffused or confluent, marginate, between contiguous surfaces, or chronic. This disease, in any of the divisions I have specified, is much more frequently an idiopathic affection than roseola, of which it would almost appear an advanced stage; it may also, like that affection, be a symptomatic manifestation of various visceral disorders, or of local irritation on the skin. There is seldom or never any constitutional disturbance arising from the presence of erythema, but, on the contrary, this state may be the cause of the eruption, and disappear or be much mitigated when the external symptoms are most severe. I shall trouble you with a concise description of the species of the disease laid down in the chart, which you will find illustrated by the models I have caused to be prepared for your inspection.

E. simplex, which, in its papulated form, is exemplified by the model No. 6,134, taken from the leg of a gasfitter, it is unnecessary to describe, as it perfectly corresponds with the general definition given of the complaint. I shall only inform you, therefore, that the appearances presented may be local or general, and may be manifested in any of the forms I have indicated. You observe it there in a chronic state, as it had occupied the locality on which it is situated some months. I have before told you there is a little elevation of the inflamed portions above the surrounding skin, and you will notice the markings of the cuticle to be more conspicuous from this circumstance, and as it were grooved here and there, whilst desquamation of the epidermis is going on, giving the inflamed spots a rough irregular surface, manifest both to the eye and touch.

E. excoriatum is a name I have ventured to apply to a species of the disease attended with excoriation of the surface, which, though most frequently witnessed in the flexures of the joints, constituting there the E. intertrigo of Willan, yet is to be observed very commonly on the lower extremities, on the insides of the thighs, and in patches on various parts of the person, not subject to "the attrition of contiguous surfaces." It commences by a red blush, as E. simplex, which in a short time becomes raised a little above the skin, when its surface appears moist, and the cuticle is found detached. If close attention be paid to this process, it does not appear that vesicles are formed as in eczema, but that the portions of the cuticle covering the quadrilateral spaces enclosed in the lines which mark the part become loose and are detached, from a little fluid effused beneath them, when the surface is left red and raw, secreting a yellowish serum that does not form crusts, but which possesses a faint unpleasant odour. It is in this species of erythema that ulcerations and sloughing are occasionally observed; but this is chiefly the case in the lower extremities, though it may occur on any part of the body, and when in this advanced stage would be referred with more propriety to a species of œdema. The portions of the integument affected with E. excoriatum, are of a dark red tint, and often pit when pressed with the finger, leaving a whitish mark, from the pressure having partially emptied the loaded vessels. This species of erythema is observed in the bedridden, on those parts subjected to pressure, or when the urine, fæces, &c., have irritated the skin by constant contact.

E. nodosum is not a very uncommon complaint; I perhaps witness it twice a month; and, though females are liable to it in twenty instances to one of males, yet the latter are occasionally affected. It consists in the somewhat sudden eruption of painful swellings, resembling nodes, of a pale red colour, and occurring chiefly on those portions of the integument which immediately cover the bones—the shins are, by *far*, its most frequent position; but the forearm, the forehead, the scalp, the lower jaw, the clavicles, or over some of the ribs, are its occasional situations, according to my experience. It is not unfrequently preceded for a day or two by pains like rheumatism, a white tongue, and constitutional disturbance, whilst the pain is much augmented by motion, or by the heat of the bed-clothes. In my opinion it is a species of rheumatism, attended with an erythematous or roseolous blush: and, like that disease, yields to colchicum and diaphoretics. The chlorotic state in young girls, and the debility attending pubescence in boys, appear to be predisposing causes. I have once or twice seen E. nodosum after the age of thirty, and that in females; consequently it would appear, as Shakspere has it, "a malady most incident to maids."

E. tuberculatum is a very rare disease, yet I have seen it many times, and show you not only a model of it, but a living example: you will observe that this man's condition very well agrees with the description given by Willan,—"that it is accompanied with great languor and debility, and that the patches are raised above the skin, are harder than the surrounding integuments, and present a dark livid hue, with (at the present time) a slight desquamation of the cuticle. When this man first applied, about a fortnight ago, the tumours interspersed amongst the patches, as mentioned by Bateman, were also observable and readily to be distinguished by the hand; at the present time they have nearly, if not quite, disappeared, though the erythema remains. My experience in this disease corresponds with that of Willan, who only witnessed it three times—"that remedies appear to be of little avail," either in averting the present symptoms, or in preventing the subsequent hectic that commonly supervenes in this rare and little-understood malady. I have seen E. tuberculatum assume the form Willan has described as E. marginatum, and then it has appeared to me to be connected with disease in the circulatory system. I show you a remarkable model of this disease—I mean *E. marginatum* of Willan—which I should call E. simplex marginatum; and, as most of the body of this poor girl was similarly affected, I may add the division *generalis* to the species and form of the affection. I shall speak of this case again presently, when you will find that the erythema was symptomatic of disease of the heart.

The last variety of erythema on the chart, to which I have affixed the name of *E. ulceratum*, I shall not here particularize, beyond mentioning that it is the not unusual termination of E. simplex and E. excoriatum. When I have to speak of ulcers, I trust you will find that this division of the disease under our notice, will meet with all the consideration it deserves.

The causes of erythema, as I have already observed, are more obscure than those of roseola, but where they can be traced, they may be said to be very nearly, if not quite, identical. As the complaint consists of little more than a subacute form of common inflammation, manifesting itself on the surface of the body, any cause to which inflammation may be assigned will be found to prove an origin of erythema; thus atmospheric vicissitudes, errors of diet, disturbances of the circulation, and local irritation, constitute the most usual sources to which the complaint is to be attributed. These causes once discovered, the treatment becomes most simple, as it consists in an endeavour to remove them upon the general principles which actuate us in the treatment of inflammatory diseases having no specific nature, which, I need not tell you, are soothing and antiphlogistic. In the chronic forms only of erythema it may be necessary to recourse occasionally to the system of internal external counter-irritation I have so consta advocated; but this system must be confined such cases only. I will, however, relate an instance or two, in the belief that I shall thus at once present you with an insight into my views, and with examples of the good or bad effects of carrying them out; so that you will be able to let the matter rest upon your own conclusions.

As on former occasions, I shall keep to those cases from which models have been taken, as far as they will serve, but I have no casts of the acute forms of the disease; their transient nature, and the little there is to represent, beyond the redness of the

surface, preventing my employing the services of the modeller. The first instance to which I have to request your attention is a case of *erythema simplex*. Henry Axelby (9), of Princes-street, Stamford-street, applied on the 31st of last October, having suffered two weeks from an eruption of red blotches on his forehead, face, and one side of his neck; they were of a bright red colour, and there was considerable swelling of the parts affected, so as nearly to constitute erysipelas, from which, however, the complaint was to be distinguished by greater chronicity in the inflammation, and by the papular form of the blotches, which revived and declined frequently. Some degree of constitutional disturbance attended this disease, but by the patient's account he had been better since the appearance of the eruption, though much pain and burning were experienced in the situations of the erythema. He had a white tongue, as seen in rheumatism, and his bowels were inactive. His parents attributed the eruption to their child having got wet and chilled, which brought on a pain in all his limbs, attended with shivering and feverish symptoms. This was a well-marked case of simple acute papular erythema, and the cause assigned for its appearance is the common origin of inflammatory action in any part of the body, which no doubt gave rise to the disease in this delicate boy. The treatment was therefore similar to what would have been directed had any other part or organ been affected instead of the integument, and consisted in a brisk calomel purgative, followed by a diaphoretic mixture, containing tartar emetic, every four hours, and an evaporating lotion to the parts affected; low diet and repose. In three or four days there was very evident decrease of the erythema, and the general health, as regards the feverish state attending the disease, was improved. An acidulated saline aperient, containing a few drops, for a dose, of the wine of colchicum, was therefore substituted for the antimonial diaphoretic, whilst the lotion was rendered slightly stimulating as well as evaporating by the addition of borax. A week's perseverance in this change removed all the symptoms, save a little roughness of the parts affected from desquamation of the cuticle.

The next case I shall read is a chronic form of the same affection, which is represented by the model numbered 6,530. The patient from whom it was taken was a gasfitter, named Charles Lewis, aged thirty-five, residing Princes-street, Drury lane. He had suffered nine weeks from this *Erythema papulatum chronicum*, and it had occasioned him so much burning pain and uneasiness that he had been a patient of a neighbouring hospital for some weeks before his application here, which was on the 14th of November. The leg from which the cast is taken was the only seat of the disease, and no cause could be assigned for its origin, unless standing constantly at the bench, filing, &c., may be considered one, in a constitution somewhat injured by excesses, and with an incipient varicose state of the veins of the affected limb. I have before described the appearances presented in this man's case; the treatment adopted consisted in the local application of a weak mercurial ointment, which was covered by a compress, wet with warm water, and supported by a bandage. The internal remedies consisted in a dose of calomel and opium, at bedtime, every night, and a dose of colchicum and liquor potassæ, in a draught of mint-water, twice a day. On the 1st of December, after these means had been used a fortnight, he presented himself much relieved; and he was directed to persist in the same remedies; gradually, however, diminishing the doses and the frequency of taking them. As the erythema disappeared, he absented himself till the 2nd of January (last month), about seven weeks from his first admission, when he was quite free from the disease; no occasion for changing the remedies first employed having been called for. If this model be attentively observed, it will be perceived that there is an appearance of abrasion or excoriation here and there, as though ulceration were about to commence. Nor is such appearance illusory, as ulcers on the legs are preceded by this kind of appearance, as I shall have occasion to repeat when treating on that subject. The wet compress and bandage were recommended in this case as the most effectual means of averting such an occurrence, and they appeared to have the desired effect. The state of erythema presented by this model may also be considered to indicate the transition of E. simplex to the next species of the disease I shall illustrate by a case, which is an instance of *Erythema excoriatum intertrigo* that had assumed the chronic form, and is exemplified by the model of the elbow-joint of Sarah Slate, at this time a patient of the institution, having been admitted on the 12th of December last. The age of this individual is seventy-two, and she has suffered ten months from her erythema, which she states commenced from poverty and bad living; to which causes I may add, that of neglect of fitting ablutions, so common at her advanced period of life. The first manifestations of the disease, as is usually the case, were in the hams, at the back of the knee-joints; and they appeared as a red patch, attended with heat and tingling, which soon became moist, and extended to other parts of the body subjected to the attrition of contiguous surfaces. The discharges from this disease were most disagreeable, and resembled decaying wood, or a damp cellar inhabited by cats. There was much constitutional disturbance occasioned by the irritation and the want of sleep, which it naturally produced.

This patient had considerable *embonpoint* remaining, notwithstanding all her sufferings, and this much contributed to her discomfort and the continuance of her erythema. An examination of the affected parts showed no pimples or vesicles, but a smooth, red, shining surface, intersected with deep grooves, which were the natural markings of the parts appearing more conspicuous from the swelling and tension of the effusive inflammation. The whole surface was kept moist by the discharge I have mentioned, and seemed deprived of its epidermis. The treatment adopted to relieve this poor woman was strictly palliative. The tepid bath; a lotion of milk, containing half an ounce of liquor plumbi acetatis to the pint; alterative mercurials at bedtime, and diaphoretic aperients during the day. She has attended weekly since her admission, and the erythema has continued to amend under this treatment, so that at the present time all constitutional symptoms may be said to have left her; consequently, on the 7th of this month, when I last saw her, there were visible the mere remains of her complaint only, consisting in a little redness, and dry desquamation of the cuticle in one or two situations—appearances I have found yield to a few drops of Fowler's solution, combined with an alkali, which I accordingly prescribed. The model now presented to your attention represents a very rare form of erythema, that I have very constantly found attendant upon disease of the heart or circulatory apparatus, and, consequently, to resist all means of cure. Sophia Collings, aged twenty-one (of Green-street, Stepney), admitted June 25, 1845, is the name of the young woman from whom it was taken; she had suffered six months the appearances exhibited on the cast of her face, which very accurately represents the disease; the hands, arms, and legs were also affected, but not the body. I should mention that on the latter situations the erythema was papular; it also seemed here and there to assume a circular figure, and on passing the hand over the part it gave the sensation of irregular bands firmer than the healthy integument being spread beneath the surface, which was very slightly raised where these patches or papulæ were situated: they very much kept to one position, but often faded and revived, sometimes assuming a livid or purple hue.

The statement of this patient would lead me to believe that this eruption had been rather sudden in its attack, not having been preceded by any remarked indisposition beyond slight occasional dyspnœa after exertion or walking up stairs. The pulse was fluttering and irregular (about 75), the heart's action being very diffused, and its pulsations not so audible as is natural—an irregularity not amounting to an intermission occurring every fourth or fifth beat, when I thought I could distinguish a *bruit de soufflet*. Various constitutional means were essayed for the relief of these symptoms without any marked benefit; and, as the case was curious and interesting, I obtained on several occasions the valuable opinion of my friend and colleague Dr. Southwood Smith upon it; but, though five or six months have passed over since she first attended here, I do not think any improvement has occurred; indeed, latterly, she has become anasarcous, and I have detected fluctuation in the abdomen, so that I fear her case may be regarded as affording little reasonable hopes of recovery. I have not entered into a minute detail of the treatment employed in this case, inasmuch as I regard this erythema as entirely symptomatic, and I do not profess to enter into the general principles which direct our remedies under such circumstances; yet, as I have witnessed this variety of the disease I have endeavoured to describe on several occasions, I considered it necessary to bring the present illustration of it before you.

Erythema nodosum I have been unable to exemplify by a model for two reasons: the first is, the rare occurrence of the affection at this season of the year; and the second, that, as it occurs for the most part in young delicate women, they have a considerable reluctance to allow a cast to be taken of their legs—on the shins of which, you are aware, the erythema is commonly situated. I have indulged this feeling of delicacy until an opportunity should present where it did not exist in a marked degree; and, as this has not occurred, I therefore shall briefly recount the course of one of the latter instances of the affection, to show you that parties in adult age may be the occasional subjects of its attacks, and that it may supervene during the existence of other maladies of the skin.

E. Trebble, aged 38, residing opposite the Almshouses, Hoxton, was admitted during the summer a patient of this institution, suffering from lepra vulgaris, which manifested itself only on the elbows and knees. This in a month or two yielded to the remedies employed, and I lost sight of the patient for some time; and she discontinued taking medicine or using the baths.

About a month ago I was summoned by her husband to visit her, with what was considered an attack of erysipelas, as she was confined to her bed. The case proved to be one of *erythema nodosum*. It would appear that she had been suffering from influenza, as she termed it, and the great debility characterizing that complaint was very evident; when suddenly both shins began to swell as though they had been struck here and there, and contused. These swellings, which were irregularly scattered on the fronts and sides of the tibiæ, were prominent, red, and painful to the touch; somewhat oval in shape, varying from the size of a gravy spoon to that of a dessert spoon. The lepra also had begun to show itself again; an occurrence, no doubt, arising from the cutaneous irritation present, which, you have been informed, very commonly excites or revives an old morbid habit, of whatever kind that may happen to be.

The constitutional derangement in this case was considerable, the tongue being loaded with a white coat, and great prostration of the vital powers being present; I, therefore, directed a light tonic, combined with a mineral acid, twice or three times a day; a dose of colchicum, and an opiate at bedtime, and a little wine with the meals, which were to be light and nutritious. The local pains and inflammation were assuaged by an evaporating lotion applied warm, and by rest in the horizontal position. These measures had the desired effect, so that in ten days this patient was enabled to attend here, and she is now under treatment for the leprous disorder for which she originally applied, all remains of her erythema nodosum having vanished. The last example of erythema I have to cite is that very rare form of it represented by the model 6,944, labelled *E. tuberculatum*, cast from the leg of Morris Conroy, aged forty-nine, of Bayswater. I shall, when we next meet, show you this patient, so that you can compare his disease with its representation. His statement is that the eruption appeared on his arms and legs; three months ago, like small hard lumps or tubercles, which soon became livid; but that he had been otherwise ill, and, having had no regular employment, his diet had been very bad,

which his appearance—that of an asthenic individual of sixty (his age being forty-nine)—completely verified. The treatment adopted has been tonic; the vapour bath being the local means resorted to. He attended on Tuesday last, as I understand, improved in health; but, as I did not see him, his attendance to-day was not arranged. I will take care, however, that you shall witness this disease, which is so rare as never to have been seen by Bateman, and three times only by Willan.

The next subjects I shall consider will be *Œdema* and *Erysipelas*.

ORIGINAL CONTRIBUTIONS.

REPORTS ON THE DISEASES OF FEMALES.

By EDWARD RIGBY, M.D.,

Fellow of the Royal College of Physicians, Senior Physician to the General Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, Examiner on Midwifery to the University of London, &c.

I think it will be better not to illustrate the subject of cephaloma by cases until I have offered a few remarks on the principal features of hæmatoma, or fungus hæmatodes, as it is more commonly called. It is a soft, organized, vascular, and somewhat spongy mass of a dark livid or purplish hue, arising by a broad base usually from the body or fundus of the uterus, and irregularly divided into numerous lobes and nodules, having an appearance, consistence, and feel of loose cellular tissue, into which blood has been extravasated from a powerful vessel, and has solidified; when cut into, it resembles a mass of coagulated blood which is divided into irregular portions by an interstitial cellular tissue, and, like cephaloma, its surface is covered by a ragged vascular membrane, which is probably a production of the lining membrane of the uterus. It exhibits a much greater degree of vascularity than in cephaloma, although the vessels occur in the same sort of patches on the surface, and between the lobes of which the mass consists.

Although its progress is usually more rapid than that of cephaloma, it does not seem to pervade the uterine tissue so generally in the early stages of its course, but is then more isolated, and appears to be more immediately surrounded by structure which is healthy, or nearly so. Dr. Hooper, in his beautiful plates on the morbid anatomy of the uterus, says that it is very rarely found assuming a tubercular form; but if I may judge from those cases where, from having its commencement on the os uteri, I have been able to see the disease during life, and at an early stage of its progress, I should certainly come to the conclusion that it frequently begins as an isolated nodule or tubercle—in fact, much as it is usually observed to commence in other parts of the body where it can be more readily examined, as the lip, breast, &c. When seated in the cavity of the uterus, its precise condition at an early period can never be ascertained, for the very existence of the disease can scarcely be decided upon until its extent has become so considerable as to be reached by the finger through the os uteri. Like cephaloma, it assumes a polypoid form when it projects into the vagina, but it is much softer and more brittle; whereas a polypoid mass of cephaloma is tolerably firm. When occupying the uterine cavity its structure is very delicate, for it bleeds profusely on the slightest touch, and severe attacks of hemorrhage are not unfrequently induced by any sudden shock, as coughing, &c. It makes its way with great rapidity into the bladder and rectum, forming in these cavities a similar irregularly lobulated tumour as in the uterus, the whole consolidated into one mass of disease.

The symptoms of hæmatoma are so much the same with those of cephaloma that it might be fairly asked, how can the one be distinguished from the other? There are the same derangements of the menses, the same profuse discharges, gastric irritation, and gradually increasing state of general cachexy. Still, however, there are some points of diagnosis which are, perhaps, worthy of note. The os uteri is not gradually destroyed by the peculiar pulpy softening, as in cephaloma, but it becomes obliterated and lost in fungoid swelling and growths, &c. The body of the uterus is usually larger than in cephaloma; the attacks of hemorrhage are far more profuse; the slightest touch is followed by blood, and the most gentle and cursory examination frequently produces a severe discharge. The course of the disease, as I have already remarked, is more rapid than that of cephaloma; so that, if the symptoms and characteristics now enumerated be compared with those which I have given in my description of cephaloma, I think that a sufficient mass of evidence may be obtained in most cases for forming a tolerably correct diagnosis.

The general treatment is precisely the same as that of cephaloma—mild alteratives and laxatives, combined with, or followed by, chalybeate medicines, seem to be the means best adapted for assisting the powers of the system in their struggle with the disease. The same lotion of the ferri sulph. c. extr. conii, I have found also serviceable in hæmatoma.

From the irregularly lobulated character of its form, its broad base, and brittle structure, it seldom gives any chance of a portion of the mass being removed by ligature; on the other hand, when it occurs as an isolated tubercle on the os uteri, and therefore within reach of the speculum, it may be successfully removed by escharotic applications. These cases, however, are rather the exceptions than the rule.

I am sorry to acknowledge that I have recorded but few cases of fungoid disease; but the majority of these I have seen have been hospital cases, which have come before me at a very advanced stage, and that only for a short time; in many instances they have been admitted in a dying state; in others, where the system was still capable of deriving benefit from remedies, they have again returned home on feeling themselves better.

A. M., aged 44, mother of four children.

June 11, 1840. Continued watery discharge, with occasional severe pain about the uterus; bowels confined; pain on evacuation of the rectum and bladder.

Her last labour was sixteen years ago, and until lately her health has been always good, and the menstruation regular; subject to slight leucorrhœa occasionally; has been accustomed to walk a great deal. At the beginning of the present year the catamenia continued for five weeks without stopping, followed by leucorrhœa and bearing-down pains, which she attributes to over-exertion, great exposure to cold, and excessive drinking at that time.

Exam. per Vaginam.—Uterus large and apparently immoveable; os uteri nearly resting on the perineum; much enlarged and open; lips thick and swollen, firm, but not hard,—surface smooth; cervix very short. The finger passes into a large cavity, the sides of which are pulpy and fungoid. The examination produced much suffering, but no hemorrhage; a fragment of soft brain-like matter, which was very fetid, came away with the finger.

℞. Extr. hyosc., extr. gentianæ, aa. gr. v. o. n.; confect. sennæ, o. m.

℞. Ferri. sulph., extr. conii, aa. gr. viij.; aq. distill. ℥j.; ft. lotio. Semicup. calid. alternis noctibus.

June 22. Less pain; discharge thick, and occasionally lumpy; greater difficulty in passing water.

℞. Sp. ammon. arom. m. xx.; infus. gentianæ, aq. menth. pip., aa. ℥vj.; ft. haustus. ter die sumend.

℞. Morphiæ hydrochlor, gr. ¼ o. n.

We are still a good deal in the dark as to the manner in which malignant diseases commence; perhaps the only facts of any certainty which we possess on this subject are that vascular congestion, usually of an atonic character, had existed for some time previously in the part; and that this congestion was the result of, or at any rate connected with, long-standing derangement of the assimilating functions. The patient had confessedly lived a hard life, in every sense of the word, and was now coming to the age at which the menses begin to disappear—a period peculiarly liable to uterine disease.

The large and immoveable uterus, the short cervix, tumid lips, and open mouth, with the cavity beyond filled with pulpy structure—the previous hemorrhage and history of her case—would leave little doubt that malignant disease existed. The absence of nodular growths from the inferior segment of the uterus, the capacity of its cavity not blocked up by irregular lobulated masses of fungoid structure as in hæmatoma; the absence of any amount of hemorrhage after the examination; and above all, the appearance of a portion of brain-like matter, leave little doubt that this was a case of cephaloma. As no serious derangement of the general health existed, I merely prescribed a little simple medicine to regulate the bowels, and the lotio ferri c. conio, to which I have already alluded. The discharge became thicker, and, as a usual consequence, the pain was mitigated; but the increasing difficulty in passing water, showed too surely the progress of the disease. Feeling a temporary improvement she left the hospital.

M. J., aged forty-six, mother of eight children; has had two abortions, the last was about three years ago, at the third month of her pregnancy.

Feb. 15, 1840. Pain around the hips and loins, with difficulty in evacuating the bladder and rectum; general health not much affected; has a sanguineous watery discharge. The catamenia became irregular about a twelvemonth after her last abortion, both as to the intervals and duration of the periods, the former being sometimes five weeks, the latter a fortnight.

Exam. per Vaginam.—Os uteri low down in the vagina, its edge nearly indistinguishable from a complete fringe of soft excrescences growing from it, and from the canal of the cervix. As far as the finger can reach is a quantity of fungoid growth to be felt, which easily breaks down and bleeds.

℞. Pil. hydrarg., extr. hyosc, a.a. gr. v., o.n.

℞. Ferri. sulph., zinziberis, a.a. gr. j.; extr. gentianæ, gr. iij. m. f. pil. j. mitte tales xij.; sumat ij. bis. die. Lotio plumbi.

Feb. 22. The discharge is no longer coloured with blood, but has a yellowish tinge. Omit pil. hydr. c. hyosc. Rep. alia.

March 7. Much pain and difficulty in passing water; bowels confined, with bearing down, and apparent obstruction in passing fæces; the discharge is yellow and but little diminished in quantity; latterly it has been again mixed with blood; gets little or no rest; has been obliged to take laudanum twice a day to relieve pain.

℞. Pil. ferri sulph.; extr. hyosc, a.a. gr. v., o.n.

℞. Aq. menthæ viridis, aquæ distillatæ a.a. ft. ℥vss.; acidi sulph. dil. m. x.; syrupi rhœad. ℥ss. m.; adde magnes. sulphatis ℥ij. solve; ft haust bis. die. Rep. lotio.

April 25. Not so well in general health and feeling; much bloody discharge, with clots during the last week; much pain and difficulty in passing water. Rep. med.

May 23. Occasional bloody discharge; at other times it is thin and watery; much pain and difficulty in evacuating the bowels and bladder; general health is tolerable. Rep.

I would not have selected this case, the report of which is rather imperfect, had I taken notes more frequently of malignant disease when considerably advanced. It suffices, however, to illustrate a point to which I am desirous of directing attention, viz., that malignant disease frequently exists to a very great extent without seriously breaking up the general health immediately, and that although we know it is incurable, and will, of a certainty, ultimately destroy the patient, it is exceedingly difficult and hazardous to give any very decided opinion as to the duration of the patient's life. In the above case the rectum and bladder were evidently becoming implicated in the disease, and at one time there was a suspicion for a while that she could no longer retain her water. From the condition of the os and cervix uteri, and the history of the symptoms, I presume that this was also a case of cephaloma.

A druggist and his pupil have recently been brought up before the tribunal of Correctional Police of Paris, on a charge of manslaughter for having sold syrup of poppies to a woman for administration to her infant. The child died, and the accused have been remanded

ON THE ABSORPTION OF URINE IN THE BLADDER.

By M. BOUCHARDAT.

Translated for the MEDICAL TIMES by ALFRED MARKWICK, Esq., Surgeon to the Western German Dispensary, and formerly Externe to the Venereal Hospital, Paris, &c.

Is there any absorption of the urine that passes into the bladder and remains there during a longer or shorter period? Is the portion absorbed richer in water than the urine remaining in the bladder?

The solution of these questions is interesting in a physiological point of view, and still more so as regards hygienics: for if the urine be absorbed, and the principles destined to be climinated from the body be again carried into the circulation, we can easily understand how disorders of more than one description can result. There are two ways of solving these questions:—1st, by analysing separately the urine that escapes from one of the ureters before it has been allowed to remain in the bladder, and that which has remained in the bladder, and which has passed into it through the other ureter; 2nd, a salt that can be easily found in the blood may be injected into the bladder of an animal. I shall relate at the end of this article the experiments I have performed on the subject, and will now allude to the analysis of the urine passed by each ureter, and collected—the one after it had remained in the bladder, and the other immediately it escaped—by means of a urethro vaginal fistula. This interesting case was communicated to me by M. Trifet, House Surgeon, under Professor A. Berard. It is as follows:—

Jeanne Bolvent, aged 40, charwoman, living at Terré (Ille et Vilaine), entered the Hospital of La Pitié on the 5th of March, 1845. She is of a good constitution, and has always enjoyed excellent health up to the time of the confinement that occasioned the accident for which she came into the hospital. She married at the age of thirty-two, and remained four years before she became a mother. The labour was natural, and, after lasting from two to three hours, ended in the birth of a daughter. Two years elapsed, and she again became pregnant; the labour, however, was this time both much longer and more difficult, and lasted nearly three days. The child, a female, which presented by the head, was stillborn. The patient says the forceps were not employed, in consequence of the head of the child pressing on the symphysis of the pubes, and of the difficulty, as the accoucheur stated, of introducing them at this distance. Nevertheless, the lochial discharge took place regularly, and, everything appeared to be going on favourably. She got up at the end of the fourth or fifth day, and began to eat, but was still perfectly ignorant of the infirmity under which she now labours; and it was ten or twelve days before she noticed that the urine oozed out involuntarily. The medical men of the district recognised the nature of the disease, and sent the unfortunate patient to Paris with a certificate declaring her to be affected with a vesico-vaginal fistula. She came with a full determination to undergo any operation calculated to relieve her of the infirmity.

When she entered the hospital, the urine was observed to be continually making its escape from the vagina, and the patient declared that she experienced several times a day a desire to make water, and that she was able to excrete a tolerably large quantity at a time. Moreover, a rather large tumour could be felt in the hypogastric region, and on the introduction of a catheter into the bladder, three or four centilitres of urine were drawn off. It being very evident that the fluid which constantly escaped from the vagina was urine, that the bladder was capable of containing a pretty good quantity, and that the patient voided it voluntarily, expected to find a very minute aperture on the vesico-vaginal partition; but, notwithstanding the most careful examination of this partition, it was impossible to discover the smallest opening. An injection was thrown into the bladder through the urethra; none of the fluid, however, was observed to pass into the vagina, neither could the opening be found out by means of the catheter; and it was necessary to discontinue this first examination without discovering anything.

On March 6 she was examined a second time, but with no better success than on the preceding day. All that could be ascertained was, that a certain quantity of urine was constantly escaping from the vulva, where it produced a very painful irritation, and an exanthematous and vesicular eruption, extending as far as on the buttocks. It was also ascertained, as on the first occasion, that a portion of the urine collected in the bladder, and was evacuated by the natural passages and by the sole efforts of the patient.

On the 17th we again sought for the fistula, a large *speculum brisé* being used for the purpose, and, after a careful examination, were about to give up all hopes of finding it, when we perceived a limpid and apparently urinous fluid ooze through the orifice of the neck of the uterus. From that moment the idea of a vaginal fistula was entirely abandoned, and a uterine fistula alone thought of. M. Berard tried to discover the opening in a direct manner by introducing a stilette into the orifice of the uterine neck, and a catheter into the bladder, and then attempted to bring them into contact, but failed; the two instruments being separated by the whole thickness of the vesico-uterine wall. The patient being now fatigued, and complaining of very acute pain in the hypogastrium, the examination of the parts could no longer be continued.

18. In consequence of these exploratory trials, the patient experienced slight shiverings, general uneasiness, headache, and pains in the abdomen. (Abstinence, seidlitz water, cataplasms.) (a)

19. The pain in the hypogastrium increases and extends to the left lumbar region. The tongue is clammy, the mouth bitter, and the thirst excessive; there is also anorexia and nausea; the sleep is agitated and the pulse frequent. (Ten cucurbitulæ cruentæ on the painful part; poultices, lemonade, abstinence.)

21 and 22. The symptoms still continuing, the cupping was again had recourse to.

23. The pain is less acute, the pulse less frequent, the nausea is disappearing, and the reparatory sleep returning.

26. The amelioration continues, and the appetite has considerably increased; food is now given to the patient.

April 6. The patient's health being completely restored, M. Berard, still believing he had to do with a vesico-uterine fistula, and hoping to obtain a cure by preventing the urine from coming in contact with the edges of the opening, introduced a double-current catheter in the bladder through the urethra, for the purpose of producing a continued irrigation of cold water. The fluid entered the bladder through one of the canals of the catheter, and escaped with the urine through the other. This remedy, however, was obliged to be discontinued, as the accidents became again developed after two days' perseverance in its application.

8. Shivering, headache, anorexia, nausea, and pains in the abdomen, particularly in the left lumbar region, so acute as to cause the patient to cry out when the least pressure was made on the part; the tongue was white and the mouth clammy. (Seidlitz water.)

In a few days these symptoms entirely disappeared.

On the 13th the patient appeared completely restored, when suddenly, and without any known cause, she experienced very acute pain in the left lumbar region; the urine no longer escaped through the fistula, and collected in the bladder in about the same quantity as on the previous days; after three or four hours the urine again flowed by the vagina, when the pain disappeared as if by enchantment. The patient informed us that she had several times noticed that the urine did not flow from the vagina, and that each time she had been attacked by pain in the left lumbar region, which disappeared immediately the excretion of the urine by the genital organs became restored. The idea then immediately occurred to M. Berard of there being a communication between the left ureter and the uterus. According to this hypothesis, the urine secreted by the left kidney would be poured into the cavity of the uterus through the urethro-uterine communication; and, as it is probable that the vesical extremity of the ureter is obliterated, if the uterine orifice becomes obstructed, the urine, no longer being able to escape, accumulates in the ureter, which it distends, and, reaching as far as the kidney, occasions the pain to which we have just alluded. In order to ascertain whether the quantity of urine that passed was the same as that which accumulated in the bladder, each was collected in a separate vessel, in the following manner:—The bladder having been completely emptied by a catheter, the patient was placed on a close-stool,

(a) [It is, I think, acknowledged by all that cataplasms or poultices are the most disagreeable, the most filthy, and indeed the most disgusting epithems that can be applied to the human body; and when it is considered that, together with these objectionable qualities, they are, from their composition, by no means calculated to produce the effects for which they are applied—effects solely dependent on the heat and moisture they are capable of containing—it is not to be wondered at that they should have been in a great measure abandoned.

A poultice should contain a large quantity of fluid, not in a state of combination, as is the case with linseed-meal and bread, but free, so that it may come into direct contact with the part to which the epithem is applied, and produce the whole of its beneficial, soothing, and relaxing action, and retain its temperature for a considerable time. It should also be clean and light, and free from anything likely to enter into decomposition. It ought not to be bulky, and should admit of being easily retained in its place.

An article answering to this description will, I believe, be now shortly introduced, and, from the numerous successful trials that have been made of it, both by myself and other professional men, I am convinced it will be found a very valuable and effectual medium for applying moist heat, and one far superior to the ordinary poultices and fomentations. In proof of this I may mention the two following cases.

C. E., aged 16, applied for advice, in consequence of a phlegmonous mammary abscess, to a medical man of the neighbourhood in which she resided, who advised bread and water or linseed-meal poultices. She persevered in these remedies for some time; but finding no benefit, and being told that the abscess must break, she became very uneasy. On examining the part, this termination appeared inevitable. I recommended her to discontinue the poultices, and gave her one of the epithems above alluded to, with instructions to saturate it with hot water and keep it constantly applied to the part, taking care to change it once in twelve hours. She called again a few days afterwards and thanked me for having afforded her so much relief. She stated that the epithem was always warm and moist when taken off, and was much more comfortable to the part than the poultices. On examining the breast, I found it considerably reduced in size, much less tense, and the pain greatly diminished. I advised her to continue for a short time longer, which she did, and the abscess entirely disappeared.

In this case I have not the slightest doubt that, had the patient continued in the application of the bread and water or linseed-meal, the abscess must have broken; whereas with this article resolution was speedily effected.

The next was a case of peritonitis. Here, in addition, of course, to other remedies, poultices and fomentations had been applied, and of both of which the patient continually complained. The first, he said, annoyed him by their weight and offensive smell, by the "mess they made him in," and by their so soon getting cold and dry, and requiring to be so frequently renewed; the second he objected to from the constant and necessary repetition of the flannels. I gave him one of the epithems, which he was much delighted with. It was light and soothing to the part, did not get cold or dry, and required changing but once or twice in the day. I might mention various other instances of cutaneous eruptions on the head and face, of bruises, inflammation, abscess, &c., in which this newly-invented material has been used, but the above will be sufficient to prove its advantages and superiority.—TRANS.]

the pan of which was to receive the fluid that flowed from the genital organs. At the expiration of two hours the urine that had collected in the bladder was drawn off by a catheter, and compared with that that had passed by the vagina. The quantity was found to be exactly the same, but that which had remained in the bladder was much darker than that which had passed through the fistula. This experiment was repeated several times, its duration being varied, and always with a similar result.

On the 23rd, in order to ascertain whether the communication exists between the bladder and the uterus, or between the ureter and the uterus, an injection, coloured blue by indigo, was thrown into the bladder, and its escape prevented by placing the finger exactly over the meatus urinarius. By then opening the vagina so as to expose the orifice of the neck of the uterus, we readily convinced ourselves that the fluid which escaped through this passage was not that which had been injected into the bladder, inasmuch as it was perfectly transparent and colourless, and had both the smell and the taste of urine. Two or three spoonfuls were collected, that it might be better judged of.

There exists, therefore, no communication between the bladder and the uterus; and as there is a constant dribbling of urine through the orifice of the neck of the uterus—as the quantity of fluid which thus escapes is always equal to that which collects in the bladder—and lastly, as the patient experiences severe pain in the left kidney whenever the dribbling becomes stopped—it is probable, if not certain, that there is a communication between the uterus and the left ureter, and that the vesical extremity of this passage is obliterated. Not being able to cure this patient, we had made for her a urinal, to be adapted to the neck of the uterus, and kept in its place by means of a curved stem fixed to a truss. This apparatus she could not endure, and therefore was obliged to make use of a common urinal, fixed upon the thigh, and adapted to the vulva. She left the hospital at the beginning of the month of July.

I analysed, on two different occasions, the urine from the ureter that empties itself into the bladder, and that from the one that empties itself into the vagina. Both specimens were collected by M. Triflet, who brought them to me himself. The results of this examination are as follows:—

May 25, 1845.—1st. The urine collected in the bladder is limpid, and of a yellow colour; has a strong smell, a specific gravity of 1·021 at the temperature of 15 deg., and an acid reaction. By evaporation over a water bath, 1,000 grammes were found to yield 37·8 of a residue composed as follows:—Urea, 23·3, uric acid, 0·61; mucus, 0·17; fixed salts, 13·73. This urine contains, besides, traces of hippuric acid which I do not estimate.

2nd. The urine passed by the ureter that empties itself into the vagina is limpid, very light coloured, and has but little smell; its density is 1·015; it is but slightly mucous, and reddens litmus paper faintly. It was carefully evaporated over a water bath, and the quantity of dry residue obtained was in the proportion of 20·25 to 1,000 of urine. This residue was composed of—urea, 12·2; uric acid, 0·14; mucus, 0 1; fixed salts, 7 81. This urine also contained traces of hippuric acid.

June 11.—3rd. The urine collected in the bladder is thick and high-coloured; its specific gravity is tolerably high, namely, 1,025 at the temperature of 15 deg. It has a powerfully acid reaction, and lets fall, on standing, a large quantity of mucus and uric acid, of a reddish-yellow colour. On careful evaporation over a water bath it yielded 46·42 per 1,000 of dry residue, composed of—urea, 30·54; uric acid, 0·86; mucus, 0 42; inorganic salts, 15·30. This urine contained traces of hippuric acid.

4th. The urine passed by the ureter that empties itself into the vagina has but little colour, but contains a tolerably abundant mucous deposit. It reddens litmus paper, and is of specific gravity 1·018 at 15 deg. It yielded 26 90 per 1,000 of dry residue, composed as follows:—Urea, 10 42; uric acid, 0·16; mucus, 0·21; inorganic salts, 12; and traces of hippuric acid.

The results of the preceding analysis prove that the specimens of urine that were examined differed only in the proportion of water they contain; the urine collected in the bladder containing less than that passed per vaginam. This may depend either on a different secretion of the two kidneys, or on a special absorption by the orifices of the veins arising from the bladder. This opinion appears to be much the more probable one, and is founded on an experiment, the results of which I will now briefly relate.

I injected 2 grammes of prussiate of potash, dissolved in 20 grammes of water, into the bladder of a strong male rabbit. A strong ligature was afterwards placed round the penis so as to prevent the urine from escaping. Two hours afterwards the rabbit was killed by opening the carotid artery. A solution of persulphate of iron placed over the course of the principal veins of the abdomen produced, by its absorption, a very evident blue colour. The same re-agent also produced a blue colour when poured on the internal surface of the heart. This effect, however, was not so sensible in the serum of the blood. Notwithstanding this latter result, it appears to me evident that the prussiate of potash was absorbed and carried into the blood. And considering the results of the foregoing case, and those of the experiment I have just related, we may, I think, conclude—

1. That the urine that enters the bladder, and remains there a greater or less length of time, is partially absorbed.

2. That the portion which is absorbed is richer in water than that which remains in the bladder, and which becomes more and more concentrated.

In a hygienical point of view it is of great importance to retain the urine in the bladder as little as possible; and it has been remarked by the old observers that this is more particularly indispensable when the perspiration, after having been very abundant, becomes suddenly checked. In this case, to retain the urine in the bladder would be, they say, to expose ourselves much more to the various accidents and diseases that occur after sudden chills and suppression of the perspiration.

19, Langhalm-place.

ON CHOLERA.

By EDWARD MONKS, Esq., Surgeon.

Cholera, cholera European, sporadic cholera, or choleric diarrhœa, are the names which we apply to the following collective symptoms, viz.: vomiting and purging, with great prostration of the circulatory and nervous functions, attended with cramps, &c., occurring as a sporadic or epidemic malady.

The vomiting is frequent, and often the most troublesome and persistent symptom, all fluids received into the stomach being soon rejected, the vomited matters being a thin muco-bilious-looking fluid, or a thin coffee-ground-looking fluid.

The diarrhœa consists of a thin, copious, dirty, or greenish-looking pea-soup discharge, often very offensive; or a pale gruelly-looking fluid, and then with little or no fæcal odour; at times the discharge contains a quantity of a bottle-green admixture; in many cases the diarrhœa is arrested while the vomiting is urgent, or *vice versa*.

The Collapse, or dangerous Prostration of the Circulatory and Nervous Functions. Here you have a small feeble pulse; often not perceptible pulse at the wrist; a general sub-heat of surface; the extremities being cold, clammy, and of a leaden-blue colour, from venous capillary congestion.

The expired air is of a sub-heat, or cold; the tongue is moist, cold, paler, and perhaps furred; the aspect collapsedf or sunken, being of a grey or venous-like pallor, with blue lips, and a sunken state cellular tissue beneath the inferior eyelids, which latter are also of a bluish grey or leaden tint. The patient complains of the feeling of heat all over, notwithstanding the external reduction of temperature, and endeavours to throw off the clothes, to lie as much as possible uncovered. There is an intense thirst and a constant desire for cold water, which desire is no sooner gratified than it is again vomited, and the desire is as urgent as before. The breathing is quicker and shorter, and chiefly thoracic, with a sense of weight or constriction across the chest. The pupils are natural, or slightly contracted, and the mind unaffected. There is a restlessness and anxiety, with an occasional deep sigh and a disposition to sleep; but the patient is unable to do so, and the eyelids remain only partially closed during this short seeming disposition. The voice is faint and whispering; the urine, is suppressed in some cases, diminished in most with at times detention. The cramps mostly complained of are those of the abdomen and calves of the legs.

Treatment.—With a view of relieving the vomiting, cramps, &c., the following draught answers best in my hands:—

℞. Sp. æther. nit. ʒj.; [illegible] ℈j. vel [illegible]; tinct. opii. *m.* xx.; aquæ aromat. ad ℥j. M. [illegible] should be added to ℥ss. of hot water, and given immediately, after which a warm mustard cataplasm should be applied to the abdomen or back, which should be allowed to remain on about ten to twenty minutes, or until a degree of pain or redness follows.

Heat also should be applied to the feet by the means of hot water contained in bottles or some metallic vessel; and, if my patient does not object, I employ in addition the following enema:—

℞. Tinct. opii *m.* xx.; potassæ chlorat. ʒj; creosoti *m.* ij.; aquæ aromat. ʒj. M. To be added ℥x. of warm beef-tea, or some mucilaginous vehicle, and used as an enema. If there be very great collapse I add ʒij. of the oleum terebinth. to the clyster.

The above means being employed are followed by the most happy results; and, in many cases of dangerous choleric diarrhœas or collapse, even in a few hours, or by the following day, a convalescing state is evident. If, however, on your next visit, which should not be protracted beyond eight or twelve hours, and you find your patient still in collapse, or only partially rallied, and the vomiting still troublesome, you must now give gr. j. of calomel every hour (or every two hours), which should be washed down by only two tablespoonful quantitus of warm wine and water, arrowroot, or wine and beef-tea, in the proportion of about ℥ij. of wine to ten of the before-named fluid, and repeat the enema, cataplasm, and calor pedibus.

The above line of treatment, with such modification as individual cases suggest, is that which has proved very successful in my hands, and I do, therefore, confidentially recommend it to my professional brethren, to which I desire to add the following observations.

Ammonia *does not* prove a useful medicine in these cases, and seldom indeed in other cases in which vomiting or diarrhœa is an urgent symptom. The sp. æther. nit., potass chlorat., and t. opii *are* the best stimuli.

Cold water, or large quantities of fluid, indulged in, with few exceptions, add to the danger of the patient, or at least my first cases so indulged ended in more deaths than recoveries; the thirst, vomiting, or diarrhœa and collapse, were more or less increased by it.

A fuller pulse, a return of natural warmth, with a disposition to sleep, and less urgent thirst, are among the earlier symptoms of recovery.

To youths about fourteen about half the quantities of the several therapeutics named may be given, or even the same doses I occasionally employ.

During the convalescing periods, draughts, containing the sp. æther. nit. and potass chlorat. in an aromatic water, are sometimes useful.

Beef-tea enemata, with or without medication, are, I am sure, a valuable means of rallying the vis vitæ, by its mechanical influence upon th viscera, as well as by its dietetic properties.

Friday, P.M., Sept. 4.

The following gentlemen have been appointed Chevaliers of the Legion of Honour:—M. Salleson, Surgeon-Major of the Ambulances in Algeria; Dr. Santi, Assistant-Surgeon of the First Class to the Ambulances in Algeria; Delpecq, Assistant-Surgeon of the First Class to the Ambulances in Algeria; Lebrun, Assistant-Surgeon of the Second Class to the Ambulances in Algeria.

HOSPITAL REPORTS.

MEDICAL TIMES PRIZE REPORTS.

THIRD SERIES.

Reported by WILLIAM ANDERSON, Esq., Student at St. George's Hospital.

MEDICAL CASES.

SUBJECT—DROPSY.

CASE I.—Thomas Silk, aged sixty, shoemaker. Admitted May 21, 1845. Under Dr. Nairne. [illegible]; tongue white and moist; bowels con- [illegible]gh-coloured; pulse 96, full and [illegible] much swollen; has had a cough [illegible]toration for two months; has no [illegible] and can draw a deep breath without [illegible] began to swell six weeks ago. Ordinary diet.

℞. Pulv. jalapæ C. ℈ij. o.m.; cat. sinapis thoraci; mist. oxymellis scillæ, ℥j. 6tis horis.

24. Less swelling in legs; large crepitation at [illegible]er part of left lung; snoring; rhonchus under [illegible]ht clavicle; there is a loud valvular murmur.

℞. Pil. digitalis C. gr. v, ter die.

Haust. sennæ, ℥iss. statim. Omit pulv.

26. Has still a good deal of pain in the chest; does not make much water. Cat. sinapis pect.; spirit. genevæ, ℥ij.

27. Pain in chest relieved; makes more water.

29. Better; makes a good deal more water, can lie down at night; legs less swollen.

31. Makes more water; less swelling; breathing difficult.

June 1. More difficulty of breathing; coughs much; less swelling of legs; cannot sleep.

℞. Haust. morphiæ c., oxymell. scillæ, spir. ætheris nitrici aa. ʒj. o.n.

3. Breathing better, but still difficult; complains of fluttering in left side. Cat. sinapis regione cordis.

5. Feels better; cough easier.

7. Breathing easier; makes more water; legs much less œdematous.

10. Gums affected by the mercury; still troubled with hacking cough. Omit. pil.

℞. Potassæ. bitart. ʒiv. cras et o.n m.

12. Has still a good deal of cough, but is otherwise better; swellings nearly gone

14. Makes plenty of water; bowels open; swellings have entirely disappeared.

17. Went out relieved.

CASE 2.—Elizabeth Campion, aged fifty-three; married; eight children.

Admitted August 14, 1845. Under Dr. Nairne.

Feels thirsty; appetite bad; bowels open; pulse 96, sharp, not easily compressible; complains of palpitation of the heart; there is excessive dyspnœa, and she has not been able to lie down in bed for three weeks; respiration quick and oppressed; has had difficulty of breathing only five or six weeks; has often had rheumatism (chiefly in right leg and hip); the legs are much swollen, and the abdomen is said to be so, but is not in that state at present; she complains of pain across the lower part of the chest, chiefly on the left side; and she has a slight cough. Ordinary diet.

℞. Mist. camphoræ, ℥j.; liq. ammon. acet. ℥iss.; tinct. hyoscyami, m. xxx.; spir. æther. nit. ʒj. ter die.

℞. Haust. morphiæ, ʒxj.; spir. æther. nit., ʒj. o.n.

15. Has had no sleep; pulse 100, sharp and jerking. Emp. belladonnæ pect.

16. Specks of bloods in sputa. Catap. sinapis.

℞. Ext. hyoscyami, gr. v., o.n. Omit. haust. morphiæ.

17. Much relieved by mustard poultice; complains now of great pain between the shoulders; has cold perspirations; feet and hands very cold. Catap. sinapis. int. scap.

℞. Spir. æther. s.c., m. xxx.; mist. camphoræ, ʒxj.; tinct. lavandulæ. c. m xxx. stat.

℞. Haust. sennæ, ℥js. cras.; spir. vin. gall. ℥js. subinde.

18. Pulse 84, full, not easily compressed; has spit up a good deal of blood to-day; tongue brown and dry; pain in region of heart in drawing a deep breath; feels composed and relieved by the draught. Cat. sinapis sterno.

℞. Potassæ nitratis, gr. x; spir. æther. nit.; spir. juniperi, aa. ʒj.; aquæ distill., ʒix.

19. Has had no sleep last night; seems sleepy this morning; breathes more easily.

20. Much the same.

21. Had a bad night, is sleepy this morning; has violent pain in the chest.

22. No sleep; excessive dyspnœa

℞. Haust. opiates, ℥js.; spir. æther. s.c., m. xx. o.n.

The dyspnœa continued unrelieved; she spat up a considerable quantity of blood, and died suffocated in the evening.

SECTIO CADAVERIS.

Body well formed, but spare; anasarca of the lower extremeties.

Thorax.—A small quantity of fluid in the pericardium; heart much enlarged by dilatation of all its cavities, especially those of the left side, the walls of which were somewhat thinner than natural. Tricuspid, mitral, and pulmonary valves healthy; aortic valves thickened, contracted, and extensively adherent to the walls of the artery. The whole of the thoracic aorta was dilated, especially at its arch, where it formed a kind of pouch. The internal surface of this vessel was roughened by an extensive deposition of atheromatous patches throughout the greater part of its extent. The cavities of the heart and all the vessels were extensively blood-stained. The coagula contained in these parts were large, firm, and of a very dark colour. Some fluid, of a dark colour, was found in the cavities of both pleuræ, but there was a much larger quantity in the right than in the left. The right lung contained several patches of pulmonary apoplexy, one of which, a very large one, was situated at the back part of the inferior lobe. The posterior part of this lung was loaded, with the exception of the apoplectic patches, with large quantities of red, frothy serum; its tissue was soft and easily torn. The whole of the posterior part of the left lung was also loaded with large quantities of red, frothy fluid, and also contained some patches of an apoplectic nature. The anterior part of both lungs was healthy.

Abdomen.—A small quantity of dark-coloured bile-tinged fluid was found in the cavity of the peritoneum, the capsule of the liver was opaque and slightly thickened, but the tissue of the organ appeared healthy: it presented venous hepatic congestion of the second degree to a great amount. The other viscera presented nothing remarkable.

CASE 3.—Wm. Brinkworth, aged 27.

Admitted March 20, 1845. Under Dr. Nairne.

Pulse 84, sharp; bowels confined; urine tolerably free and highly albuminous; sleeps well; tongue pretty clean.

There is great œdema of the whole body, especially of the penis, scrotum and lower extremities; there is some cough and crepitation in the chest; there is no pain, but a sensation of fulness in the chest, which interferes with respiration; this came on suddenly ten weeks ago, before which time he was perfectly well, and has increased ever since; sounds of the heart are natural. Fish diet.

℞. Pulv. jalapæ C. ʒss. o. m.

27. Much the same; V. S. ad. ʒxij.

℞. Infus. digitalis, ʒiv.; tinct. scillæ, m. xv.; spir. æther. nit., ʒj.; potas. acet., ℈j.; aq. menthæ virid., ℥vjss. ter die.

28. Bowels not open.

℞. Olei ricini, ℥ss. statim.

29. Had a rigor last night, and another this morning.

30. Bowels not open; urine scanty.

℞. Pulv. jalapæ C. ℈ij. cras.

April 1. Face less swollen; bowels quite open; watery motions. Ordinary diet.

Rep. pulv. o. a. m.

3. Much the same.

Rep. pulv. o. m.

5. Rather more colour in the face; swellings no less; urine very scanty.

℞. Ext. colocynth. C. gr. vij.; ext. scillæ, gr. ij.; hydrarg. chloridi, gr. j. o. n.

8. Bowels open twice a day; motions watery; the left hand is more œdematous; complains of feeling very tight.

10. Makes no more water; the swelling of the right arm and hand is increased. To have six acupunctures in the abdomen.

12. A great quantity of clear fluid has oozed from the punctures, which have given great relief; the thighs and legs are still enormously swollen, and the skin very tense; urine very scanty, and more than half of it appears to consist of albumen.

℞. Potassæ bitart., ʒvj. o. m.

13. Bowels not open; the thighs and legs more painful from tension. To have twelve acupunctures made in the thighs.

℞. Pil. colocynth. c. hyoscyamo, gr. x. M. Rep. potassæ bitart.

14. Has been sick to-day; the last punctures have not discharged so much as those in the abdomen. Beef-tea and arrowroot, milk, ℈j.

16. Complains of pain in both sides of the chest in coughing; cough most troublesome in the evening; feels thirsty; makes rather more water.

Emp. lyttæ lat. thor. utraque.

℞. Haust. salini c., ant. pot. tart. gr. ¼; 6tis horis.

℞. Ext. colocynth. C. gr. x.; olei tiglii, m. j. o. s. m.

19. The pain much relieved by the blisters, which have discharged a great deal; the body and face less swollen; feels sick after taking the pills; bowels well open; motions watery.

Rep. mist. Mutton chop. Rep. pil. sine ol. tig.

22. Cough very troublesome at night, and accompanied with a large quantity of expectoration; urine less; bowels open well. Omit. pil.

Rep. Mist.; pulv. jalapæ, C. ℈ij. o. n.

There is great mucous crepitation heard over greater part of the chest.

26. Bowels open; has been sick this morning.

29. Coughs much less; bowels not open.

℞. Ext. jalapæ, ext. colocynth. C. aa. gr. v. o.n.

May 1. Complains of great soreness of scrotum, the skin of which is chafed by the bedclothes, and discharges much watery fluid. Videat. chirurg. de scroto.

3. Feels more comfortable, and not so tight; swellings of the legs and body are diminished; bowels opened freely by the pills without griping.

6. Complains of much tightness and tension of legs; bowels open about four times daily; legs to be punctured again.

8. Makes more water, but complains of griping in the bowels after taking the powder; the legs discharge freely from the punctures. Omit. pulv.

10. More comfortable; swellings less; bowels open; makes more water; griping in bowels has left him. Roast slice.

13. Feels easier; makes more water; bowels open; swellings diminishing.

15. Cough rather troublesome; the calves of the legs are rather red and tender from rubbing against the bedclothes.

17. Does not feel so well, and complains of a sensation of pressure in the right side of the chest; bowels not so open. Olei ricini, ℥ss. statim.

20. Complains of a sensation of pressure in the right side of the abdomen, where the skin is very tense from the œdema; bowels open only twice; makes less water. Omit. pil.; twelve acupunctures to be made in the abdomen.

℞. Pulv. jalapæ C. ℈ij., o.m.

24. Coughs very much; is troubled with sickness, and griped very much. Haust sennæ, o.n.; loco pulv.

27. Still very sick; bowels very open; makes less water.

29. Sickness still continues; bowels open.

Rep. haust sennæ. Rep. pil. colocynth. C. jalap. o.n.

30. Sickness has left him.

31. Bowels very open; motions watery; makes less water, which is highly albuminous.

June 3. Has had no return of sickness; bowels well open; stools not so watery.

Rep. pil. iij. o.n.

Spir. vin. gal., ℥ij. quotidie.

5. Feels a pain in the left lumbar region; bowels very open; motions very watery; face not quite so white.

7. Complains of tightness across the chest; has less expectoration; makes less water; bowels open.

10. No return of sickness; pain in side returned.
12. Bowels confined; feels tightness of abdomen. Beef-tea.
℞. Haust. sennæ, ℥jss. statim.
℞. Elaterii, gr. ½ in form. pil. o.m.
Rep. spir. vin. gal. Omit. m̄ia.
14. Bowels have not acted until to-day, when he took haust. sennæ, ℥jss.
℞. Elaterii. gr. ss. o.m.
17. Purged well; does not feel quite so tight in the abdomen.
21. Bowels confined; swellings increasing. Haust. sennæ, ℥jss. statim.
℞. Elaterii, gr. j. o.m.
24. Has watery motions; feels a little easier.
26. Pill sometimes produces sickness; is purged freely.
28. Very sick; abdomen much softer.
Rep. pil. o.a.m.
July 1. Continues vomiting for about two hours after the pill.
2. Still vomiting as before. Omit. pil.
3. Sickness has ceased.
℞. Ext. jalapæ; ext. colocynth, a.a. gr. v. o.n. Haust. sennæ, o.a.n.
5. Is rather griped.
Rep. pil. et haust. adde sing. haust. spir. myristicæ, ʒj.
8. Feels better; says "he feels more himself," but is very weak.
℞. Haust. cinchonæ, ℥jss.; acid. sulph, dil. ♏. xv. bis. die.
10. Appetite better; feels a little stronger.
12. Much the same.
15. Makes more water, but feels very tight, especially up the right side. Twelve acupuntures to be made in the part complained of.
17. A large quantity of fluid runs away from the punctures; cheeks and hands more swollen; a slight erythematous blush on the left side of the abdomen.
18. Fluid still continues to flow from the punctures; bowels not open. Olei ricini, ℥ss. statim.
19. Face and hands much more swollen; legs and body less tense; fluid is still flowing; left side of abdomen is very tender; feels very drowsy, and is very hungry.
Rep. haust. ter die. Extra diet.
Rep. Olei ricini, si opus sit.
22. The redness on the abdomen has disappeared; abdomen much more flaccid; fluid has ceased to flow; bowels freely open; very weak. Vini Xerici, ℥jv. Omitte spir. vin. gal.
24. Face much less swollen; arms still much swollen; complains of tenderness of abdomen.
26. Has vomited this morning; has more colour in his face; bowels regular; takes oil occasionally; the pills failing to act. Omit. pil.
Rep. olei ricini, o.a.m.
29. Vomiting continues; he is not so drowsy; has cough, with slight expectoration; less swelling of hands and face; abdomen getting tight again; bowels not open.
℞. Potassæ bitart, ʒjv. o.m.
31. Seems very weak after the powder; cough worse.
℞. Potassæ tart., ʒjv.; haust. pimentæ, ʒxj.; spir. myristicæ, ʒj. o.m.
Rep. haust. cinchon. et vin.
August. 2. Last night he was seized with severe pain low down in the right side, extending up to the shoulder; increased by deep inspiration and coughing; great pain on pressure over ribs; was ordered poppy fomentations and opium draught, which sent him to sleep; the pain is very acute this morning, obliging him to take very shallow inspirations. Pulse 120; bowels open. Hirudines, xviij. lat. dext. Omit. mist.
Rep. Haust. opiat. h.m.
℞. Pil. hydrarg., gr. iij.; opii, gr. ¼.; pulv. scillæ, gr. j. 6tis horis.
3. Passed a good night; pulse 84, weaker; tongue cleaner; bowels open; pain much relieved; cough worse. Emp. lyttæ lat. thor. dext.
4. Very sick; still a little pain in the right side on deep inspiration; blister rose well; gums rather tender; makes more water; bowels not open.
Rep. oleum ricini cras.

5. Bowels have not yet acted; still very sick and drowsy.
Rep. olei ricini, ℥ss.
6. Mouth sore; makes plenty of water; still a little pain on deep inspiration; still sick; very weak. Omit pil. Arrowroot.
7. No pain in chest; bowels open; no appetite; swellings legs; mouth less sore.
℞. Haust. cinchonæ, ℥jss.; acid. nit. dil. ♏. xx. bis die.
8. A little return of pain in the chest; bowels not open; still sick.
℞. Acid. nit. dil., ♏. xx.; tinct. lavand. C. ♏ xxx.; aq. distill., ʒxj. ter die.
11. Retains the medicine; bowels well open; throws up the arrowroot. Roast slice.
12. Bowels open; still sick. Spir. vin. gal. loco vini.
16. Much the same.
℞ Pil. gambogiæ. C. gr. x., o.a.n.
19. Bowels not open; constant sickness.
℞. Mist. camphoræ, mist. ferri C. aa., ʒvj.; pulv. jalapæ C. ℈ij., o.a.n.
20. Powder makes him sick. Omit. pulv.
℞ Ext. colocynth C.; ext. jalapæ, aa., gr. iv.; ext. hyoscyami, gr. ij. o. n.
21. Bowels have not been open for three days; integument of right leg has given way and discharges freely.
Rep. pil. nocte maneque. Enema catharticum statim.
23. Right leg discharges from the front of the knee and lower part of the calf; bowels confined.
℞. Decoct. aloes C.; inf. sennæ, aa., ʒvj., o. m. Omit. pulv.
26. Constant sickness; bowels not open. Omit. mist.
℞. Pil. aloes C.; ext. colocynth. C., aa., gr. v., o. m.
28. Very sick; bowels confined. Olei ricini, ℥ss. stat.
30. Leg discharges a great deal. P.
Sept. 2. Was seized with excessive difficulty of breathing in the night; coughs and spits frequently; face shrunk; is very drowsy; bowels not open to-day. Cat. sinapis. thor.
℞. Spir. æther. s. c.; tinct. lavandulæ c. aa. ʒss. mist. camphoræ., ʒxj. ter die.
3. Breathes more easily.
4. Much the same. P.
7. Breathing became more laborious, and he died at eleven A.M. The friends would not allow the body to be examined.
Case 4.—Charlotte Brookes, aged twenty-three, dressmaker.
Admitted August 15, 1845. Under Dr. Nairne.
Tongue pale and dry; pulse 96; good strength; feels thirsty; bowels generally confined; does not make water freely; there is ascites and anasarca of both legs; she complains of pain in the head; pupils dilated; sees very badly; feels uncomfortable when lying down; pain in head worse at night and when she wakes; appetite bad; legs began to swell eight months ago; abdomen was a little swollen, but has increased a good deal in the last three weeks; dimness of sight came on ten months ago; urine acid, pale and highly albuminous. She left the hospital three weeks ago, having been in for seven weeks.
℞. Mist. ferri C.; mist. camphoræ aa., ʒvj. ter die; pulv. jalapæ C. ʒss., cras mane.
16. Pulse 96, feeble.
19. Abdomen less swollen; contains more flatus than fluid; feels better; makes plenty of water; has taken the powder every morning.
℞. Mist. ferri C., ℥j. ter die.
Rep. pulv. o.a.m.
21. A little less swollen; does not make so much water; has been very sick.
Rep pulv. tertiâ quaque mane.
23. Has the globus hystericus occasionally; breathing short; does not make much water.
℞. Potass. bitart., ʒjv. o.a.m.
25. Feels very low; has great pain in the epigastrium; pulse weak; feet cold; no appetite; sick incessantly, bowels confined. Spir. vin. gal., ℥ss. subinde. Cat. sinapis epigastrio. Omit. pulv. Olei ricini, ℥ss., si opus sit.

26. Worse; pulse feeble; bowels open; countenance anxious; breathing short. Vini Xerici, ℥iv. Loco spiritûs vini gallici.
℞. Spir. æth. s. c., ♏. xx.; spir. lavand., ♏. xl.; aq. distill., ʒxj. ter die.
27. Feels better; makes very little water; bowels open.
28. Had a morphia draught last night; slept better; pulse rather stronger; no appetite; strong beef-tea.
℞. Haust. salin., ℥jss.; pulv ipecac. C. gr. v. o. n.
30. Great difficulty of breathing came on in the afternoon, which continued till the evening; faculties entire to the last. Died at ten P.M.

Sectio Cadaveris.

General Anasarca of the Whole Body.

Abdomen.—The peritoneal cavity contained a very large quantity of serum, of a dark yellow colour; both kidneys were much increased in size and in weight. The cellular tissue round the capsules of these organs was condensed, and firmly adhered to them, so that it was difficult to separate it from them. The cortical structure in both kidneys presented well-marked specimens of mottling degeneration, and their surfaces were granular. The disease in the left kidney appeared to be somewhat more advanced than it did in the right kidney. In the calices of both kidneys were several small calculi and some sand, and the mucous membrane lining these parts was inflamed. The peritoneal covering of the liver was thickened and opaque, and the edge of the liver was thickened and rounded off. Venous hepatic congestion of the second degree existed to a great extent. The spleen was of its natural size, but congested and hard. Uterus and ovaria were natural. Intestinal canal healthy.

Thorax.—Large quantities of yellow-coloured serum were found in the cavities of both pleuræ; both lungs were towards their posterior part loaded with large quantities of red frothy serum, and in the lower lobes there were several patches of red hepatization; these patches were greater and in a more advanced stage of hepatization in the right than in the left lung. Pericardium distended with yellow-coloured serum; heart enlarged by hypertrophy of the walls of the left ventricle; valves healthy; slight atheromatous patches at the root of the aorta, immediately above the valves; large loose coagula of blood, for the most part fibrinous, in the right cavities; small loose fibrinous coagula in the left. Cranium not examined.

Case 5.—Joseph Dean, aged thirty-four, baker.
Admitted June 21, 1845. Under Dr. Nairne.
Tongue white; pulse 84; skin cool; bowels open; motions white; urine scanty, and of a deep saffron colour, staining his linen yellow; skin and conjunctiva of a greenish-yellow hue; appetite pretty good; complains of pinching pain just above the umbilicus, which comes on towards evening and continues all night, but during the daytime he is tolerably free from it; the abdomen is much swollen, with evident fluctuation, a dull sound being given out at the upper part; the feet and ancles are œdematous; there is occasional itching above the umbilicus; he sleeps badly, and has fallen away for the last eight months; has no cough, but is troubled with wind in the stomach and acid eructations; eight weeks ago he first experienced pain in the abdomen accompanied with vomiting; in a few days the skin became yellow; about six weeks ago the abdomen began to swell, and three weeks afterwards the feet became œdematous; for the last twelve months he has had occasional pain in the region of the liver.
℞. Pil. hydrargyri, gr. iij.; scillæ contritæ gr. j. ter die.
℞. haust. opiatus c.; spir. æther. nit. ʒj. o. n.
22. Slept well; has less pain in the abdomen; bowels well open.
23. More pain in the abdomen; passed a bad night; makes more water, which is of a dark colour.
Rep. haust. omni nocte et mane si opus sit.
26. Pain in the abdomen very bad at times; urine very dark-coloured; motions white; bowels regular; he has not required the draught in the morning.
27. Vomited this morning.

28. Somewhat better; urine not so dark; still vomits occasionally. Fish diet.

July 1. Vomiting has ceased; seems more cheerful; makes very little water; motions of darker colour.

Haust. seunte cras.

2. Very weak; has no appetite; bowels not open; is troubled much with wind; gums rather sore. Omit. pil.

℞. Olei ricini, ℥ss.; ap. menthæ pip. ℥j. statim.

3. Abdomen more swollen; still sick; bowels well open; motions of darker colour. Beef-tea.

℞. Pulv. jalapæ c. ℈j. o. m.

5. Abdomen blown up with flatus; pain increased after meals; makes more water, which is not so high-coloured; bowels well open.

8. Much more emaciated; still has occasional vomiting; makes less water; bowels well open; no complaint of pain in the abdomen; œdema of legs extending higher up; is very weak.

Spir. geneveæ, ℥iij.

10. The abdomen is more swollen, there is no tympanitis at the upper part; bowels open; no appetite; pulse very irregular. Mutton chop.

12. Still vomiting; bowels not open; only has occasional fits of pain in the abdomen.

15. Bowels confined; is much emaciated; countenance haggard.

℞. Olei ricini, ℥ss. cras et p. r. n.

17. Still vomits; the matter brought up is of a dark green colour.

19. Abdomen much distended; there is more swelling of the legs and thighs; he is very weak; has no appetite, and his countenance is dreadfully sunk. Vini rub., ℥vj. loco spir. gen.

22. Complains of great pain and tightness across the abdomen, which is painful on pressure; tongue red and glazed; sordes on teeth; bowels not open. Takes nothing but the wine.

Half-past ten P.M., died.

SECTIO CADAVERIS.

Thorax.—Universal adhesions of the pleuræ on left side of chest, not of recent formation, but easily separable; left lung healthy, slightly congested at the posterior part; some old adhesions at the anterior part of the right side of the chest; right lung healthy, also congested at the posterior part: heart small; coagula in right ventricle.

Abdomen.—The peritoneal cavity contained a large quantity of dark brown coloured fluid, tinged with bile, with some loose flakes of lymph floating in it. Stomach much contracted, especially the right half, from extensive scirrhous deposit in the subperitoneal cellular tissue. Intestines contracted and drawn together from the same cause; but here the disease was deposited in tubercles, instead of implicating the whole of the cellular tissue surrounding the gut, as in the stomach where the parts had become much thickened. The omentum was drawn up and converted into a scirrhous mass, exactly resembling the stomach. The peritoneum covering the liver was similarly affected; and the cellular tissue around the duct, and the gall bladder itself, were considerably thickened, preventing the escape of bile or its entrance into it. Gall bladder much contracted. Liver larger than usual: the ducts were much dilated and full of watery fluid tinged with bile. Spleen very small. Peritoneum much thickened. Mesenteric glands universally affected with deposits of scirrhous matter. The whole surface of the peritoneum was much thickened, and in the region of the bladder it was nearly a quarter of an inch thick from the same cause.

CASE 6.—Hannah George, aged thirty-eight; married.

Admitted June 18, 1845. Under Dr. Nairne.

Skin cool; tongue clean; bowels open; appetite bad; sleeps well.

She was in the hospital three months ago under Dr. Nairne, when six gallons of fluid were drawn off from the abdomen, which is now again enormously enlarged, very tense and hard, fluctuation being plainly perceptible; there is drawing pain in the groins; general health good.

June 20. Mr. Tatum drew off forty-nine pints of a thick, gelatinous, straw-coloured fluid, exceedingly tenacious, from an enormous cyst in the left ovary.

℞. Tinct. opii, ♏. xx.; spir. æther. s. c. ♏. xx.; mist. camphoræ, ℥xj. statim.

21. Slept well; no tenderness of abdomen; bowels not open.

℞. Olei ricini, ℥ss. cras mane si opus sit.

24. Feels very weak; bowels open. Ordinary diet.

℞. Infus. cascarillæ ℥xjss.; acid. nitrici dil. ♏. xx.; spir. æther. s. c. ♏. x. bis die.

26. Getting stronger; complains of some pain in the right lumbar region, increased by pressure. Fotus abdom.

28. Still pain in the right side of the abdomen; tongue clean. Rep. fotus.

July 1. No pain or tenderness of abdomen.

To go out relieved *pro tem.*

SURREY DISPENSARY.

INFLAMMATION OF THE BRAIN.

William Pyne, aged five, residing in Great Guildford-street, was admitted under the care of Dr. Aldis, March 3d, 1846. Pulse quick; tongue dry, not protruded; bowels open to-day and yesterday; pupils contracted; keeps raising his hands to the head; constantly screaming and moaning; deafness; attacked with vomiting two days ago; afterwards took some jalap; had a fit; was convulsed, and countenance distorted; four leeches and a blister were applied yesterday, the leeches bled for seven hours; was better after their application; the surface is now cold and the face pale; has taken some grey and white powders; vomited yesterday.

℞. Hydrarg. chlorid. gr. ij.; 2dis horis ad quinque vices.

℞. H. nitri, ℥ss. 4tis horis.

4. Bowels not open; better, and more sensible.

℞. Ol. ricini, ℨij.; terebinth., ℨij.; statim injiciend.

℞. Pulv. aloes, gr. iij.; potass. sulphat. gr. iv., attere bene, vespere sumend; abradat. capellitium. Applic. ung. iodin. C.; emp. vesicat. auribus.

Rep. mistura.

5. Fell asleep about a quarter of an hour ago; skin hot; screams occasionally; still deaf; bowels moved once; tongue clean; only one blister took effect.

Rep. hyd. chlorid, gr. ij., 6tis horis.

Rep. pulv. aloes c. potass. sulphat.

7. Pulse quick; skin hot; tongue clean; bowels open; motion to-day very black; moaning; deafness, head hot; pupils dilated; urine scanty, passed rather more yesterday; mouth tender.

℞. Pulv. colchic., gr. ijss. 6tis horis. Hirud., ij. pone aurem; postea, catap. lini. per horam ¼.

Rep. ung. iodinii, C.

℞. Ol. ricini, ℨj., alt. man.

10. Continues deaf; face flushed; urine very free and abundant; much easier; skin hot; slept comfortably for eight hours last night. App. emp vesicat. pone aures.

Rep. pulv. colchici et ung.

12. Tongue white; bowels open; urine very free; pupils contractile; seems very easy. P.

19. The patient took iodide of potassium until the 28th, when, from a recurrence of febrile symptoms, the nitre was again exhibited. On the 31st a great amendment had taken place; and on the 14th of April the patient attended at the dispensary, the hearing being slightly improved; on the 28th in other respects he had quite recovered. The colchicum was employed in the above case in consequence of the praise bestowed upon it by certain German writers, in cases of hydrocephalus. The urine appears to have become much more abundant during its exhibition.

The "Gazette Médicale de Paris" states that the same state of the system prevails in Holland as in France, and that the cholera has been very prevalent at Amsterdam and Rotterdam. No fatal cases, however, have as yet occurred.

A paper from Constantinople states that the cholera up to the 20th of July had made great ravages in Teheran; one of the Schah's sons had died of the disease, and the whole inhabitants of the city had been seized with terror. The King, the Ministers, and the Court had quitted Teheran; the diplomatic body was about to follow, and all those not then attacked were about to leave the city. The capital of Persia would be completely deserted.

REVIEWS.

The Why and the Wherefore; or the Philosophy of Life, Health, and Disease. By CHARLES SEARLE, M.D. 8vo. London, 1846. Pp. 200.

The author of this work is clearly an oddity, and one very much inclined to think and express himself as he likes. The queer, quaint commencement of the title shows him to be little obedient to the conventional ceremonies of sedate English composition. We rather like this, we are fond of a liberal, free sort of phraseology, when good taste presides over it; but we think Dr. Searle might have made choice of a better form of head-piece for his book. The preface, again, has something original about it; expressed, however, without any cant, or courting of critical favour. "All that I solicit on the occasion," says he, "I have a right to expect—fair play and no favour. The bats and the sharks will doubtless attack me; and brick-bats and mire I am fully prepared to expect will be showered at me; but to these I am invulnerable. Candid criticism and well-authenticated facts I respectfully invite; but to attacks of interested malevolence, or inapprehensive ignorance, I am, in the support of my own bosom, supremely indifferent." This is bold enough, but it has a little of swagger about it. An author should always exhibit something of that humility which is inseparable from a consciousness of fallibility; and, instead of posturizing fistically at the critics, telling them to come on, do their worst, &c., it is in far better taste neither to anticipate nor invite their severity, lest the fact of doing so should be construed into a conviction of deserving it.

This is not the case, however, with Dr. Searle, for his book, in the main, is excellent. There is very little theory about it that is novel, and very few facts that were not known aforetime; and yet, the *tout ensemble* has an air of freshness that makes it as entertaining as it is instructive. This compliment we pay to the industry and ingenuity of the author; but still with a certain degree of qualification, for he sometimes lets his imagination get the better of his judgment, and betray him into error. In many places we find him losing sight altogether of the grand principles of inductive philosophy, and generalizing with much positiveness in the absence of the facts necessary to substantiate his doctrine. Thus, he says, "We perceive or deduce the fact that all disease or derangements of health consist intrinsically and virtually in the disorder or derangement of this the primary organic action, that is to say, that of the capillary vessels and the functions they fulfil." (Pp. xix., xx.) Were we inclined to indulge in severity upon this passage, we should comment at length upon the desirableness of precision in the use of language, and acquaint our author that to *perceive a fact* is one thing, and that to *deduce* is something very *different*. What we chiefly complain of in the sentence is, that there is no foundation whatever for the general law it embraces. Though many, perhaps the majority of diseases, are more or less connected with abnormal capillary circulation, pathology has never yet demonstrated whether this be a *consequence* or a *cause*; and to decide, sweepingly and exclusively, for the latter is to do much more than established facts justify, and, in our opinion, to be very much at variance with probability. Such theory would completely exclude the nervous system and function from any direct influence in the production of disease, and make it completely subservient to the blood and vascular apparatus. This, however, would be to wage a decided war against some of the most important truths of pathology. If Dr. Searle will reflect deliberately upon the phenomena of certain affections of the nervous system, as tic douloureux, tetanus, hysteria, hydrophobia, chorea, catalepsy, and some forms of paralysis, he will see the propriety of not limiting the *fons et origo mali* to the capillaries and the fluid they contain.

Some of the author's observations upon electricity, as an active agent in the production of certain important effects in the living system, are very comprehensive and clear. Here again, however, he is not satisfied with the facts, merely as such, which experiment has provided in proof of how

useful an agent electricity is in our vital frame, but he forthwith comes to the conclusion that man is nothing more than an electrical machine, and the life that is in him is none other than electricity! Because certain electrical phenomena are consequent upon respiration, digestion, and other chemico-vital processes, Dr. Searle infers that electricity is the grand cause of these, and of all the other actions in the living system.

"In conclusion," says our author, "if it be admitted that electricity is evolved by the chemical actions going on in the animal system,—which the evidence adduced and Matteucci's experiments pretty satisfactorily prove, and that electricity is equal to fulfil all the purposes of the nervous power, which numerous experiments establish also to be the case; and that living muscular fibre is the most sensitive of all electroscopes, and that there is an electric discharge in all muscles at the moment of their contraction, as Matteucci has shown,—I will ask whether it be at all probable that Nature, with her universal economy of means, would provide any second agency to fulfil the requirements of what this one alone is quite equal to accomplish; which second power exists only in imagination—there being not a shadow of evidence to prove its existence? And as the 'vital force' of Leibig unites in its manifestations all the peculiarities of chemical forces, and of the not less wonderful cause which we regard as the ultimate origin of electrical phenomena, I may, with the facts adduced, venture to call it by its proper name, and at once affirm it to be what it really is—electricity." (P. 21.)

So, the noblest work of God's creation is a compound of certain atoms and electricity! This is man! At least, Dr. Searle's man! We are humbly satisfied to entertain a different notion of the race of humanity.

Our author's opinion is, that the chief electricity, or *life*, of an animal, is derived from the combustion in his capillary system. Of course, then, the *life*, or *electricity*, of an animal will bear some ratio to his respiratory process, and be ample in proportion as this is ample. Unfortunately, however, for this theory, the *gymnotus*, the most electrical animal known, is cold-blooded, and, consequently, can absorb and apply very little oxygen; whilst birds, whose respiratory apparatus is the largest of any animal for their size, and whose circulation is extremely rapid, and blood amply supplied with oxygen, evolve very little electricity! Our author ought to have known, again, that the *gymnotas*, *torpedo*, and other electrical fishes, are provided with a peculiar nervous apparatus for discharging electricity; and that the disposal of it is at the animal's will. Irritating them, and especially irritating their brain, causes them, in a few minutes, to evolve more electricity than the process of respiration in an eagle would be able to supply in a month! There can be no doubt whatever that the organs that accumulate the electricity are also the organs that *generate* it.

On the subject of mercury, our author is a little at discount:—"Whatever be the preparation of mercury administered," he says, "the condition in which it is received into the stomach I believe to be that of a chloride, seeing that it must be first subjected to the influence of the hydro-chloric acid of the stomach's secretion, and dissolved before it can be received into the circulation." (P. 86.) What, then, does he make of the administration of metallic mercury by mouthfuls, without a single instance being known of its *chloridification* in the stomach? How will he reconcile salivation and poisoning, by sub-sulphate and nitrate of mercury, for he cannot imagine these salts to be decomposable by muriatic acid!! These appear to us to be instances of very unstudied opinion.

We could select sundry more evidences of want of discrimination on the part of our author, but space will not permit us. There are a great many faults in his book, which, perhaps, are more the result of haste in getting it up than of anything else. But we must candidly say that it contains many excellencies of which any man might be proud. No common man could have written such a book; and we hope we have not met Dr. Searle for the last time.

TO CORRESPONDENTS.

A Handsome Portfolio *for holding the* "Medical Times"—*very desirable to those who would keep the numbers clean for binding, and easy of reference—may be had, by order of any Bookseller, or at the Office, price 6s. An allowance is made to the trade.*

S. S. S. H. D. *should apply to Sir William Burnett, the Director-General of the Medical Department of the Navy. The duties are those of assistant-surgeon, and the same qualifications are required.*

C. E V. Goate *is duly qualified according to the last regulations issued by the Poor-Law Commissioners.*

A Retired Practitioner *suggests, in reference to Mr. Smith's case, of wound of the kidney, "that the probe is a dangerous explorer, when not used with caution"; and adds, "that minus the probe, the treatment was judicious."*

J. O. T. A. *expresses his opinion of the matriculation examination of the University of London as follows.—"To cut the matter short, the examination is worthless, and no test whatever." We don't agree with him.*

H. R.—*Any well-informed practitioner will give H. R. the information he requires.*

Erinensis.—*The Apothecaries' Act gives the Society power to prosecute all persons practising as apothecaries in England and Wales, without possessing the Society's licenses; but the Court of Examiners have recently expressed their intention of abstaining from instituting proceedings against gentlemen qualified by examination before any licensing body in the United Kingdom.* Erinensis *must read both Gregory and Celsus. Irish apothecaries are eligible.*

An Old Subscriber.—*The* Medical Times *has not always been under its present management. An* Old Subscriber *will readily admit this fact on comparing the first four volumes with those of later date. The second volume is out of print.*

. R.—*The information may be found in our report of the meeting of the National Institute in our last number.*

Vindex, *on the Marylebone business, is quite illegible.*

Fairplay, *on the same subject, suggests "that Mr. C— probably aspires to a cellar martyrdom," and adds, that "his aspirations are likely to be gratified."*

Pathologicus *animadverts forcibly on the ignorance, or worse, of connecting the disease of the soldier, White, with those arising as the remote effects of injury of the d rims. "In such cases (burns and the like),"* Pathologicus *justly continues, "the mucous membrane of the intestinal tube is always found ulcerated when death occurs at a remote period from the injury, whereas," he continues, "no such change is recorded as having been present in the soldier."*

M. D., Liverpool.—*We think the license is a sufficient qualification for membership of the Institute.*

O. H. *would fall under the regulations previous to 1835, and would require twelve months surgical practice. It would require a column to answer all our correspondent's queries, the basis of an answer being at times wanting.* O. H. *should see our Almanac for 1846.*

Mr. S., *who writes on the Hounslow case, should have given the name of his informant.*

Hibernicus —*The fees for surgery usually rate at three guineas in London. The London schools are a month earlier than those of Dublin. The last day in London is October 8.*

A Naval Surgeon's *remarks are quite true; but is any further proof wanted of the absurdity of the medical testimony?*

M. R. C. S.—1. *We think he can be elected.* 2. *We know of no subsequent statute to that effect.*

The correspondent who sends us Lord Redesdale's speech corrected is thanked.

J. D.—*We believe there is no agent of the National Institute at Glasgow. Communications should be addressed to Mr. Ross, at the Institute's Rooms, Regent-street.*

THE MEDICAL TIMES *is the only Medical Journal published at its own Office, and which is free from the control of all Booksellers and Publishers. Gentlemen may procure it by an order on any Newsman or Bookseller, or it will be sent direct from the Office of the* Medical Times *to Annual Subscribers sending by a Post-office order, directed James Angerstein Carfrae, or an order on some party in town, One Guinea IN ADVANCE, which will free them for twelve; Half-yearly Subscription, 13s.; Quarterly. No number of the* Medical Times *can be fr. except to gentlemen paying in advance.*

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 19, 1846.

"Regnum tibi cum paraveris sis eo dignus."

The National Institute is established. The meeting recorded in our last number constitutes it a thing *de facto*—an Institution to stand for the future on as sure and independent basis as any of the existing colleges or universities in the realm. Its tenure of life is the strongest known to incorporate societies: its necessity in the first place, its popularity in the second. These qualifications it possesses in plenitude; and, of all the medical institutions we know, is the only one of which so much can be said.

Medical men have found by no very favourable experience that the old colleges do not answer the public need, nor fulfil the purposes of their endowment. The Colleges of Physicians insist on rules and regulations that must for ever keep from their portals the vast mass of the profession. They are governed as though it were a fundamental rule of their charters that they should provide medical attendants only for the aristocracy of our country. To be truly of them is to be at once behind the spirit of the age, and unsuited to the varying emergencies of the public weal.

Of our Colleges of Surgeons not more of eulogium can be pronounced. That in England demands even sterner rebuke. With all the inefficiency, all the negative demerits of the very worst-charactered of its sisterhood, it has shown in the face of day an unprincipled betrayal of its best supporters which can be fortunately predicated of no other corporate body, with which time has made us acquainted.

The general practitioners of Great Britain are, thus not only excluded from all the honours, comforts, and amenities of a respectable collegiateship—but excluded with terms of reproach by men often their inferiors in scientific desert, and under circumstances of gross and unprovoked betrayal.

They made the colleges all they have been; they have erected and supported splendid establishments, which, by a species of legislative juggle, now belong to other people; they have, thus paid in shame as in hard cash—and both in vain—for the trumpery distinction of being connected with colleges sinking into disrepute and annihilation under the very load of their overtopping mediocrity. Is this state of things to be continued? Will the general practitioners be for ever content with feathering nests which they are not allowed to sit in? We shrewdly suspect that this is a sort of game they will hardly like to play longer. Then what remains but to organize in concentrated force, by

themselves, and joining, one and all, hand, purse, and purpose, erect an Institution worthy of a free and enlightened and an independent profession—an Institution which, both in its governmental and educational relations, shall mirror at once the activity and liberality that characterize our age, and place English medicine before Europe in that honourable position among the sciences which English skill has already achieved for so many other branches of mental enterprise?

This is the mission of "The National Institute."

"Ars medica tota est in observationibus."—BAGLIVI.

IN nothing is the science of medicine of the present age more distinguished from that of all preceding ages, than in the accumulation of *facts*. Perhaps we shall never collect these in quantity sufficient to give to medicine a title to certainty or absolute exactitude, because of the many varieties and exceptions to generalities which changeable bodies, such as those endowed with life, necessarily exhibit. The conditions of the inorganic world come within the limitations of a few laws, and these are invariable. The properties of inorganic matter admit of classification, and they can be calculated upon with precision; because, as matter in any shape is indestructible, and in an unorganized form can take upon itself only a certain number of types and characters, these are not only demonstrable and definite, but they are unvarying. Thus, the general properties of inorganic bodies are the same whenever subjected to the conditions or modes of influence under which those said properties first came to be announced. It is a law that, at certain temperatures, water rises into vapour, and maintains its increase of volume and of elasticity; that at other temperatures it continues permanently fluid; and that at others it remains a solid, resistant mass. These facts have been so often confirmed, and, moreover, furnish such evidence of not being capable of exception, that they pass into generalities, and are at last arranged as absolute laws. So it is with the other bodies composing the organic kingdom: in so far as their powers and properties have been examined, they are found to be constant and uniform in their operations. It can always be said of them that they will answer in such and such a manner when placed under such and such circumstances. With the living world the case is altogether different. Everything composing it is subject, not only to the laws which govern the lesser kingdom of nature, but to these, certain others are superadded, which are by no means constant. We see this superaddition in the lowest animals and vegetables, which betray a tendency to change, both vital and chemical, such as is never met with in inorganic bodies. The higher we ascend in the scale of vitality, the more compound becomes the individual, and the more variable and various its functions. In man, these conditions are more fully expressed than in any other living creature; and it is for this reason that every moment of his physical and intellectual existence is one of uncertainty. As one man differs from another in stature, stamina, and intelligence, so do we find as great a dissimilitude in all the functions of which life is made up. A certain organic action may be slow in one individual, and correspondently quick in another; healthy in this, diseased in that; resistant and of long endurance here, weak and shortlived there! These are the things that make a calculation upon human strength, health, and longevity, at the best but a matter of hazard. For the same reason, also, there is no certainty concerning the influence of external agents upon the living frame. What one can endure with impunity, another will die from. Though the statistics of disease and death would seem to indicate something like regularity in the occurrence of these at certain seasons, yet the exceptions, on the other hand are so numerous as to make calculation and tabular comparison of little worth. Nevertheless, it is only by statistical inquiry, and the careful registration of facts, whether uniform or contradictory, that we can ever hope to *approach* to anything like precision in the science of medicine.

It is to this collection of *facts*, as we said at the commencement, that is owing the superiority and comparative certainty of the profession in the present day, over the profession of old. We have more data and better, to go upon, than they had; and it is to be hoped that our successors will find themselves still further advanced than we are in the scale of correct knowledge. To this most desirable end it is necessary that we transmit to them whatever our experience enables us to record, that bears any, the slightest, promise of usefulness. We particularly wish to impress this serious fact upon the mind of the practitioner. In the language of our motto, the whole art of medicine lies in observation. Nothing ought to be taken for granted in it, but all ought to be the result of experience. As knowledge is progressive, however, and as there is yet much to learn in the science and art of healing, it cannot be wondered at that the professors thereof are frequently compelled to fight in the dark. Our readers will remember an old anathema by Voltaire against us, on this score. He represents a physician as a blind man, with a club, contending with disease *in the dark*. He supposes him to strike lustily in all directions, in the hope of hitting his foe. Sometimes, Voltaire says, he does hit him, and then, he is said to have cured the patient; as often, however, he hits the latter, and then it is said that the disease has killed him. No doubt there was a time when this terrible sarcasm suited us: that time was when our profession was ruled and guarded rather by theory, than by practice and fact. We hope that in the present day we less deserve the censure than did those who lived before us; and, for the honour of our calling, we trust that those who come after us will less merit it than we do. We have a right to love our profession, as well for its sake as for our own! Having committed ourselves to its working, it becomes us to labour for it with whatever capability we have. It is a common notion—alas! much too common—that if a man get his living by physic, he need care nothing more about it. We beg to tell all such men, that they are under a contemptible mistake. Were physic like a problem in Euclid,—decided, definite, and incapable of disproof, and a man could maintain himself by demonstrating the fact of this said problem—it need not concern him to prosecute it any further. And this, for the simple reason that there would be a clear boundary to the further advance of knowledge on the subject. But with our profession the case is just the reverse—there is still too much of uncertainty in it to justify any man in a feeling of indifference on its behalf. Only by accumulating evidence, and carefully-registered facts, can it hope to be made better than it is. *Nihil temere credendum, nihil negligendum*, ought to be the leading rule of every man amongst us. Let each and every of us follow out this glorious maxim, and we should soon relieve the science of medicine of the painful uncertainty that at present oppresses it. It can never become *exact*, for the obvious reasons we have pointed out; but it can make much, much nearer approaches to this grand desideratum than it has already made. What it now is, it owes to *recorded observation*; let this be further increased in amplitude and accuracy, and our profession will rise in the selfsame ratio. We have often been pained on listening to the cool indifference with which practitioners will speak of their interesting cases—those, we mean, which confirm or constitute marked exceptions to great general principles. We have heard these serious things talked of as if they concerned only the patient and the doctor for the time being; instead of being regarded, as they really ought, matters of information for the profession at large. Many are the instances we have met with of the fruits of half a century's experience dropping into the grave with the possessor, and affording just as much service to the profession as the breath that last left him. There is a wickedness in this! Knowledge was not given to be concealed or hoarded for individual welfare—it was sent, like sunshine, to fall alike on the evil and the good. He who possesses it has no right to hesitate and wonder whether it will answer this end or that; he ought to know that it was sent to be distributed, and that, whatever the results, it becomes him to scatter it. It would ill suit the husbandman to pause in sowing until he could satisfy himself what the reaping might be.

It does not fall to the lot of every one amongst us to have much to say; it is only a few men who have much to discourse upon that is worth listening to; but, we apprehend, there are not many who cannot tell their fellow-practitioners *something*. It is impossible for a man to go over even a few years of practice without meeting with certain facts that will bear being recorded. If these things occur to him, in this wise, he has no right to keep them! He ought to remember that they are not his own, but given him to use and apply for the benefit of his fellow-creatures. An item of successful practice, told faithfully, is a guide to another to "go and do likewise"—an item of the opposite is a warning to one's neighbour to avoid danger. The road of the profession has many

dark paths in it. Who would grudge a light to a traveller on the same enterprise as himself? To him who would do so, we emphatically hold out the suggestion that he may hereafter be made responsible for the fate of his fellow-creature. We have no love of cases recorded blindfold. Many men leave volumes of manuscript behind them, that finally turn out to be only good for shaving-paper! This is ridiculous! But it cannot fail to happen to a practitioner, at all successful, that he has now and then something to say for his compeers. Let him put this down with all care, honesty, and precision—it may happen that ere long it gets a companion that adds to its character—several of these make an approach to *generality*. This is most valuable; but, if there be only a *solitary fact*, it is a significant something in the great treasury it becomes each and all of us to endeavour to fill. *Non vi sed sæpe cadendo.*

OFFER OF A BRIBE FOR A GOOD REVIEW.

15, Liverpool-street, City.

Edward Miles presents his respects to the Editor of the *Medical Times*, if he sends his work to him, which he has recently published, will it be reviewed in the *next or following number?* E. M.'s reason for inquiry is this: he has been disappointed in some cases; the review has been put off, or else some trifling notice *only* has been taken of it, from which *no extract could be taken*. All E. M. asks for is an immediate, a fair, conscientious, and honest report of it. The title is "Health, Comfort, and Longevity promoted, &c." Sixty pages. £10 will be enclosed.

The principle on which E. M. encloses a trifling sum is because he does not consider it reasonable to suppose that an editor can give up his valuable time without some small remuneration. At the same time E. M. acknowledges it would be more agreeable to his feelings, if it would answer as well, if he engaged for six insertions of an advertisement following the review. In that case the ten shillings which would be sent might be placed to E. M.'s credit.

A word, per return of post, will very much oblige, just to say whether, if E. M. sends the book, it will be reviewed *per very next number of the Medical Times*.

My plan is to take an extract from the review, if it is so favourable to allow me, and to *then* advertise the work.

Thy friend, very respectfully.

ix. month, 16, 46. EDWD. MILES.

THE BRITISH ASSOCIATION OF SCIENCE.

[*From our own Reporter.*]

The officers and council for the present year are appointed as follows:—

OFFICERS AND COUNCIL, 1845-6.

Trustees (permanent).—Sir Roderick Impey Murchison, G.C.St. S., F.R.S., John Taylor, Esq., F.R.S., Treas. G.S., the Very Rev. G. Peacock, D.D., Dean of Ely, F.R.S.

President.—Sir R. I. Murchison, G.C.St.S., F.R.S.

Vice-Presidents.—The Marquis of Winchester, the Earl of Yarborough, D.C.L., Viscount Palmerston, M.P., Lord Ashburton, D.C.L., the Right Rev. Bishop of Oxford, F.R.S., the Right Hon. the Speaker C. S. Lefevre, M.P., F.G.S., Sir G. Staunton, Bart., M.P., D.C.L., Professor Owen, F.R.S., Rev. Professor Powell, F.R.S.

General Secretary.—Lieutenant-Colonel Sabine, F.R.S., Woolwich.

Assistant General Secretary.—John Phillips, Esq., F.R.S., York.

General Treasurer.—John Taylor, Esq., F.R.S., 2, Duke-street, Adelphi, London.

Secretaries for the meeting in 1846.—Henry Clark, M.D., T. H. C. Moody, Esq.

Treasurer to the meeting in 1846.—John Sadlier Moody, Esq.

Council.—Professor Anstead, Sir H. T. De la Beche, Dr Daubeny, Professor E. Forbes, Professor T. Graham, H. Hallam, Esq., Rev. W. V. Harcourt, James Heywood, Esq., Dr. Hodgkin, Eaton Hodgkinson, Esq., W Hopkins, Esq., Leonard Horner, Esq., Robert Hutton, Esq., Sir Charles Lemon, Bart., the Marquis of Northampton, Sir John Richardson, M.D., the Very Rev. G. Peacock, D.D., Dean of Ely, Dr. Roget, Captain Sir James Ross, R.N., Professor J. Forbes Royle, M.D.H., E. Strickland, Esq., Lieut.-Col. Sykes, William Thompson, Esq., H. Warburton, Esq., Professor Wheatstone, C. J. B. Williams, M.D., Professor Willis.

Local Treasurers.—W. Gray, jun., Esq., York; Dr. Daubeny, Oxford; C. C. Babington, Esq., Cambridge; J. H. Orpen, LL.D., Dublin; Charles Forbes, Esq., Edinburgh; Professor Ramsay, Glasgow; William Sanders, Esq., Bristol; Samuel Turner, Esq., Liverpool, G. W. Ormerod, Esq., Manchester; James Russell, Esq., Birmingham, William Hutton, Esq., Newcastle-on-Tyne; Henry Woollcombe, Esq., Plymouth; James Roche, Esq., Cork.

Auditors.—Professor Austed, Leonard Horner, Esq., Lieut.-Colonel Sykes.

PROCEEDINGS OF THE SECTIONS.

SECT. B.—Chemical Science, including its Application to Agriculture and to the Arts.

POLYTECHNIC INSTITUTION.

President.—Michael Faraday, D.C.L., F.R.S.

Vice-Presidents.—Professor Graham, F.R.S., Sir R. Kane, M.D., M.R.I.A., Professer Johnston, F.R.S., Dr. Daubeny, F.R.S.

Secretaries.—Dr. Miller, F.R.S., Robert Hunt, Esq., William Randall, Esq.

Committee.—Professor Rosé, M. Dumas, Professor Oersted, Professor Way, Dr. L. Playfair, Professor E. Solly, F.R.S., J. Prideaux, Esq., Professor W. H. Grove, F.R.S., Professor Schonbein, Professor Forchammer, Robert Mallet, Esq., Henry Osborn, Esq., William West, Esq., F.R.S., Dr. Andrews, Robert Warington, Esq., Dr. Leeson, F.R.S., J. Wilson, Esq., W. Lucas, Esq., Thomas J. Pearsall, Esq., Thomas Ward, Esq., Captain B. Ibbetson, K.R.E., Dr. Percy.

THURSDAY.

Mr. Osborne "On the Action of Water in the Suburbs of Southampton on Lead."

W. West, Esq., F.R.S., now read a valuable paper on stating "The Methods as well as Results of Analyses."

Mr. R. Hunt's "Report on the Actinograph" was then read.

This instrument, intended for registering the amount of chemical influence associated with the solar rays, was exhibited last year at Cambridge, since which time, however, it has undergone some few unimportant alterations. Although the registrations are obtained upon a determinate kind of photographic paper, upon which a constancy of result was expected, it appears that the influence of the solar rays produces not merely a difference in the depth of colour but an actual variety in the colour at different times, which renders it exceedingly uncertain to determine the point of maximum action. Several curious facts connected with the solar radiations during the past summer were mentioned, particularly the peculiar condition of many flowers, in which a very remarkable development of leaves within the flower had been observed, arising from the influence of intense light and heat accelerating the vegetative process, and thus interfering with the reproductive functions of the plant. It was also stated that during the extremely hot weather of June and July practical photographists found the greatest difficulties in procuring any good daguerréotype portraits, notwithstanding the clearness of the sky and the intensity of sunlight. It was observed, during this period, that the actinograph, so far from registering as might have been expected, the maximum power of the actinic rays indicated an influence far inferior to it. If the maximum was represented by 120, the resulting effect during the brightest [illegible]s of June and July never exceeded 100, and o[illegible] tell to 80. This indicated some peculiar absorptive power in the atmosphere, due to some cause which has not been yet observed, and which, in all probability, materially influences many meteoric phenomena, and some of the great principles directing the processes of organization and life. The importance of endeavouring to arrive at the laws of this interference was pointed out, and the attention of philosophers called to the numerous curious facts developed by the agency of the discovery of photography, but which, up to the present moment, are without even a theoretical explanation.

"Notices of the Progress of Experiments on the Influence of Light on the Growth of Plants," by Mr. Hunt.

SECT. E.—Physiology.

This section held its meetings in the large room of a vacated old house in Bugle-street. The apartment was commodiously provided, and was attended by nearly a hundred persons, notwithstanding its being separated by the distance of nearly a mile from the scene of the other discussions. The following is the "administration":—

President.—Professor Owen, F.R.S.

Vice-Presidents.—Sir James Clarke, F.R.S., Dr. Roget, Dr. J. Forbes, Dr. Fowler.

Secretaries.—Dr. Sargent, Dr. Laycock, C. P. Keele, Esq.

Committee.—Sig Matteucci, Dr. Clark, Dr. J. Bullar, Dr. Engledue, Dr. R. Lee, Sir J. Richardson, Dr. J. C. B. Williams, Dr. W. Carpenter, Professor Clarke, Dr. King, Dr. Latham.

THE SENSE OF TOUCH REFERABLE TO THE BLIND AND THE DEAF.—Dr. Fowler read a paper on this subject, affirming that conceptions are stronger than sensations, and adducing, among other instances, the case of the person who, having his foot amputated, though he felt days afterwards a sensation in his toe.

"The Cause of the Blood's Circulation through the Liver," a paper by Mr. Searle, was then read.

Professor Owen and Mr. Alder also read papers.

FRIDAY.

SECT. F.—Statistics.

This section sat in a small apartment of the Victoria Rooms, and was not fully attended.

POOR-LAW RELIEF.—Dr. Alison, of Edinburgh, read a report on this subject in reference to the medical relief to the parochial poor of Scotland under the former law. Dr. Alison considered that this inquiry would supply the best test of the efficiency of the voluntary system of relief which had prevailed in Scotland until the new poor-law. Returns had been obtained from 40 towns, and it was found that in 16 of them the parochial authorities had supplied no medical relief at all, and in the rest only trifling occasional payments had been made, chiefly during the prevalence of some epidemic. Twenty-five practitioners had made a return of the estimated money value of their unrequited professional labour bestowed on sick paupers; the average was £10 5s. 7d. a year. In 33 out of the 40 towns in question no alteration had yet taken place. Of 325 professional men in the country districts of Scotland who had been applied to, 305 had furnished information respecting their remuneration for attending sick paupers; 94 of them had been receiving some remuneration, 39 of them an annual one varying from a few shillings for drugs up to £20, but only 13 received above £5 a year; among those who had received no regular annual sum, two had been paid 3s. each; in one case that was the sole remuneration received during 12 years of attendance on a number of paupers averaging 70 constant, and 13 occasional; in the other instance it was given for attendance on passing paupers to other parishes, and the medical gentleman in that case had received nothing for 21 years' attendance on paupers numbering 14 constant patients. Of the 305, 211 had never received any remuneration of any

kind for their professional attendance upon the parochial poor, or for drugs; one of these had attended 400 paupers for 8 years. Another calculated his loss by this at £70 a year; 208 had had occasion to give wine, food, clothing, &c., to the sick poor, from their own limited incomes, or to beg such things from their wealthy neighbours for them; one had known the session sell the effects of his deceased pauper patient, and appropriate the proceeds without paying him. One hundred and thirty-six returns had been obtained of the estimated value of unrequited professional labour in the country districts; on an average the parties had been ten years in practice, and the sum total given by them to the poor in professional labour and outlay was £31,417, or about £253 each on an average; they calculated the average for each pauper, including drugs, at 4s. a year. Four fifths of these practitioners reported their opinion to be in favour of giving the poor the right of applying to any medical man in the district, instead of being compelled to resort to such as had been appointed for them by the parochial boards.

MINING IN BELGIUM.—This was a review, by Mr. R. Valpy, of the mines and mining industry of Belgium, founded on the report of the Belgian Minister of Public Works.

As a coal-providing country, Belgium ranks the second in Europe; the entire ratio of the coal districts to the total area of the three principal coal countries being, in—

Great Britain.	1-20th
Belgium.	1-22d
France	1-210th

the area of the coal districts in the above countries being, in—

Great Britain .	2,930,000 acres
Belgium. . .	335,060 "
France . .	630,000 "

and the annual produce was calculated to amount to, in—

Great Britain . .	31,000,000 tons
Belgium . .	4,500,000 "
France . .	3,980,000 "
Germanic Union	3,000,000 "

The number of coalpits, which in 1829 was about 422, increased in 1830 to 652, being a very considerable addition to this branch of mining and industrious occupation.

The accidents, during the last twenty years, were 1,352, or 100 per cent. The Belgian Government, however, has excited itself with praiseworthy energy to diminish the number of accidents by establishing enactments for the careful inspection of the works in the mines, directing the particular attention of the engineers to the maintenance of efficient ventilation, encouraging the means for the discovery of better prevention from the danger of firedamp explosion, and various other ways; and they also contribute largely to the local charitable institutions, for the benefit of the miners and their families.

SECT. A.—Mathematical and Physical Science.

THURSDAY.

President—Sir J. F. W. Herschel, Bart. Secretaries—Dr. Stevelly, and Messrs. Drew and Stokes.

The President read Professor Erman's report "On Gauss's Magnetic Constants." The president observed, that, from the careful consideration which the subject required, it would, of course, be impossible to enter on any discussion of the merits at present.

Professor Powell, "On the Bands formed by Partial Interception of the Prismatic Spectrum."

Mr. Richard Laming, "On the Constitution and Forces of the Molecules of Matter." The author's propositions, if founded on truth, involve an entirely new theory of the universe, different from any which has yet been suggested, and would entirely destroy the system of electricity supported by modern philosophers. It is, in fact, a new universal theory of physical causation, which regards electricity as the sole cause of gravitation, by reason of an attraction in exercise between the atoms of electricity for one another. Electricity is thus made to be a material body, and to exist, in combination with the molecules of matter, in different and definite quantities, thereby giving to them their respective weights, cohesion, and affinities. The molecule of matter is represented as composed of a central basic atom, which has no action on similar basic atoms, but attracts around it atoms of electricity and caloric. The atoms of electricity attract around them atoms of caloric, and repulsion as a force is excluded from nature altogether; and thus the whole mechanism of creation is made to depend upon an attractive force only. The theory was illustrated by diagrams; and the demonstrations proceeding upon numerical calculations and geometrical measurements of the most simple kind, embracing the greater part of the phenomena of electricity with the leading facts in chemistry. The memoir excited considerable interest; but, as the president, Sir John Herschel, remarked, its subject was of too vast a character, and the propositions too numerous, to be followed out into all their consequences during a morning meeting. The memoir is to be followed by an experiment suggested by it, in order to prove the fact that electricity is a ponderable body. Mr. Laming said, what he contended for was, that instead of their being two electricities in nature, there was only one; and that a body being negative implied that it was charged with a greater quantity of electricity than it naturally attracted, the excess being the electrical complement, or the excess of electricity over the electrical equivalent of the atom, which excess arose from the disengaged electricity uniting with the atom near it which happened to have the least diameter in its electrical equivalent. He added, that he brought forward the subject only after many years of study and experiment.

The other papers read at this section were, "On the Variation of the Magnetic Needle," by Mr. J. G. Hartley; and "On Magnetic Causation and Intrinsic Forces," by Mr. G. Fowler.

SECT. C.—Geology and Physical Geography.

President, Leonard Horner, Esq., F.R.S., Pres. of Geolog. Society.

Vice-Presidents—The Very Rev. Dr. Buckland, Dean of Westminster; Sir Henry De la Beche, F.R.S., Director-General of the Geological Survey of the United Kingdom; William Henry Fitton, M.D., F.R.S.; William Hopkins, F.R.S. (For Geography) G. B. Greenough, Esq., F.R.S.

Secretaries.—Robert A. Austen, Esq., F.R.S.; Professor Oldham, M.R.I.A.; J. H. Norton, M.D. (For Geography) Charles T. Beke, Esq., Ph. D.

Committee.—Professor Agassiz; Professor Ansted, F.R.S.; Monsieur Le Blanc; Major Shadwell Clerke, F.G.S.; Charles Darwin, Esq., F.R.S.; Mr. Duncan (the African traveller); Professor Edward Forbes, F.R.S.; G. W. Featherstonhaugh, Esq., F.G.S., Monsieur Graves; Robert Hutton, Esq., F.G.S.; W. J. Hamilton, Esq., Sec. G.S.; J. Boscawen Ibbetson, Esq., F.G.S.; W. King, Esq.; Monsieur de Koninck; Charles Lyell, Esq., F.R.S.; Professor Von Middendorf; Robert Mallett, Esq., Pres. G.S., Dublin; Marquis of Northampton, Pres. R.S.; Monsieur Puteville; W. Sanders, Esq.; William Sharpe, Esq., F.R.S.; Rev. — Walker; James Yates, Esq., F.R.S.; Lieut.-Colonel Colby, R.E., F.R.S.; G. W. Ormerod, Esq., M.A., F.G.S.; John Phillips, Esq., F.R.S.

THURSDAY.

Mr. Keele, "On the Artesian Well, Southampton," was the first paper read.

The other papers read were—

Goeppert, professor, of Breslau, communicated by Sir R. I. Murchison, "On the Origin of the Coal in the Silesian Coal Fields." The professor thinks the origin to be by deposit of vegetables on the spot where they had existed after the manner of our peat moors.

Ormerod, Esq., communicated a paper, "On the Northwich Salt Field," which was illustrated by diagrams.

W. Sharp, Esq., who had a paper "On the Salt Mines of Cheshire," withdrew it, considering that the subject had been fully treated by Mr. Ormerod. Mr. Sharp said the principal mine was well worthy of a visit. It was 112 yards deep, but was easy and safe of descent. At the bottom was a vast area, one mile in circumference, and fifteen yards high, supported by pillars of salt twelve yards square. This space, when illumininated with blue lights, formed a splendid exhibition.

Sub-section of Ethnology.

BUGLE-HALL.

President.—Admiral Sir Charles Malcolm, K.C.B., P.E.H. Soc.

Vice-Presidents.—Dr. Prichard, Dr. R. G. Latham, Dr. Hodgkin.

Secretary.—Dr. King.

Committee.—Rugendaz, W. Ogilvy, Esq., J. B. Jukes, Esq., Dr. Beke.

"On the Comanche Indians." By W. Bollaert, Esq.

"On the Indians of Texas." By W. Bollaert, Esq.

"Remarks on a Comanche Vocabulary." By Dr. G. Latham. According to the evidence of language, the Comanches were disconnected with the other tribes both of Texas and the United States. Their specific affinities were with the Shoshonie, or Snake Indians, on the boundaries of the Oregon territory, New Mexico, and California.

THURSDAY.

SECT. D.—Zoology and Botany.

VICTORIA ROOMS.

President.—Sir John Richardson, M.D., F.R.S.

Vice-Presidents.—Charles Darwin, M.A., F.R.S.; Dr. Robert Brown, F.R.S., V.P.L.S., Professor E. Forbes, F.R.S.; H. E. Strickland, Esq.

Secretaries.—Dr. Lankester, F.R.S. T. V. Woollaston, Esq., B.A., F.C.P.S.; H. Wooldridge, Esq.

Committee.—W. Spence, F.L.S.; — Priaulx, Esq.; Dr. W. Carpenter, F.R.S.; G. T. Fox, Esq., F.R.S.; John Hogg, Esq., F.L.S.; Von Middendorf; Robert Ball, Esq., M.R.I.A.; William Thompson, Esq.; Robert M'Andrew, Esq.; Professor Ansted, F.R.S.; Professor Agassiz; Hewitt Watson, Esq.; C. C. Babington, Esq., M.A., F.L.S.; George Newport, Esq., F.R.S.; Professor Owen, F.R.S.; Rev. Leonard Jenyns; W. Yarrell, Esq., F.L.S.; Professor Bell, F.R.S.; Professor Balfour; R. Patterson, Esq.; J. Gould, Esq., F.R.S.

Hogg, John, Esq., F.L.S.—"Additions to a Synopsis of the Classification of the Genera of British Birds."

A paper was read from Mr. J. Blackwall, containing a "List of Periodic Birds at Llanwst."

"An Account of some Shells and other Invertebrate Forms found on the Coast of Northumberland and of Durham. By Wm. King, Curator of the Newcastle Museum." Most of the objects treated of in this paper were obtained at different times from the cobbles and decked boats which frequent the fishing-grounds between the Dogger bank and the coast stretching from the Tweed to the Tees. The following are the principal shells and corals, &c., obtained:—Halicondria mammillaris, Halicondria nov. sp., Retepora Beaniana, Hypothyris psittacea, Pecten radiatus, Crenella decussata, Crenella nigra, Modiola vulgaris, Leda minuta, Astarte Scotica, Axinus flexuosus, Cyprina Islandica, Myris undata, Mya Truncata, Panopaeda Arctica, Rimula Noachina, Tuochus Millegranus, Scalaria Trevelyaniana, Natica Gadenlandica, Fusus Antiquus, Fusus Norvegicus, Fusus Turtoni, Fusus Islandicus, F. Berniciensis; and Buccinum Undatum. The animals were brought up

by dredging, and found in the pleistocene beds of the tertiary strata. He confirmed Captain Laskey's observations, which announced the discovery of these animals many years ago. One of the species found by the captain, the terebratula cetacea, had been found by Mr. King. The statement of the existense of such animals on our seas when made by Laskey was doubted.

Professor E. Forbes pointed out, on a map of the British isles, the localities where the bodies had been dredged. He said that the extinct species spread over the greater part of the tertiary strata, but many of them were identical with existing species. Most of these animals which now existed were found only in the northern seas, not farther south than the North Cape, though on the coast of America they extended as far south as Cape Cod. They were entirely unknown in the British seas. Some of the living specimens were also extremely curious and very rare. They were particularly interesting as serving to clear the reputation of Captain Laskey, a Scotch naturalist, who had described a number of new shells found in the Scottish seas, many of which were believed not to be natives of our seas. He was supposed to have fraudulently inserted them in his catalogue, and he was consequently alluded to in modern works of conchology as being no authority whatever. It could not be doubted, however, that some of the species which Captain Laskey mentioned were washed out of ballast heaps, and were in reality only natives of the West Indies.

Professor Owen read his paper "On the Homologies of the Vertebræ, and on the Temporal Bone." He said his object was to establish ideal type of the skeletons of vertibrated animals, by which the homology of one bone in one animal with another bone in another animal might be fixed. He employed the word "homology" as it was used by German writers in contradistinction to "analogy." The bones of the fore limb of a lizard, for instance, were homologous to those of the fore limb of a mammal, while those in the wing of a bird would be only analogous to them. He might add that the term had a directly different signification in the sense in which he used it from what it had in logic. A bone might have three different kinds of homologous relations — namely, special, general or ultimate, and serial. What was one bone in one animal might constitute five or six distinct bones in another, as single bones in the human skeleton were often compound bones in other animals; but the definition which he attached to the word "bone" might be understood when he stated that he took the temporal bone in the human skull as being one bone, and not as being composed of several bones united together. The learned professor then proceeded, by reference to a number of well-executed diagrams, to explain his theory by a comparison between the temporal bone of human anatomists with corresponding bones in the skeletons of the echidna or ovo-viviparous mammal, the ostrich, the crocodile, the amphibian, and the fish.

Professor Forbes next read a paper on the "Pulmograde Medusæ of the British Seas," with notices of the Medusæ at present abundant in the Southampton Water. The learned professor, previous to delivering his paper on the Medusæ, drew the attention of his auditors to an exhibition in a glass of a Mortella, and two small Lancelletts. Both were found on the Cornish coast; the latter was considered the most curious species in British zoology, burying itself in the sand, with its head only appearing; and if disturbed would swim about with great rapidity, and then again bury itself in the sand, as was shown by the glass case in which it was exhibited. The professor stated that the Mertella had been placed in a glass globe, with two other Lancelletts, and, although a much smaller animal, he had found means to devour both, commencing his attacks in an Abyssinian fashion—namely, in the parts not vital. He then proceeded to treat of the Medusæ, commonly known as the Jelly Fish, and no where more abundant than in the Southampton Water. He then proceeded to enumerate and describe the varieties, which he had condensed, in opposition to the opinions of previous naturalists, into three species. The professor was listened to with great attention, and received at the close of his address much applause.

MISCELLANEOUS CORRESPONDENCE.

CURRICULA OF STUDY REQUIRED BY THE COLLEGE OF SURGEONS AND THE APOTHECARIES' SOCIETY.

[To the Editor of the Medical Times.]

SIR,—Permit me, by means of your extensive circulation, to publish the following comparison of the respective qualifications required—1st. For the diploma of the College of Surgeons of London, from gentlemen who commenced their professional studies previous to 1838. 2ndly. By the Society of Apothecaries, for their license, from gentlemen who commenced their professional studies on or after the 1st of October, 1835.

COLLEGE OF SURGEONS	APOTHECARIES' SOCIETY.
Age, twenty-two years.	Age, twenty-one years.
Five years engaged in acquirements of professional knowledge.	Apprenticeship, five years.
Lectures.	*Lectures.*
Anatomy and Physiology—Two sessions.	Anatomy and Physiology—Two sessions.
Dissections—Two sessions.	Dissections Two sessions.
Surgery—Two sessions.	Principle and Practice of Medicine—Two sessions.
Physic—One session.	
Chemistry—One session.	Chemistry—One session.
Midwifery—One session.	Midwifery - Two sessions.
Materia Medica and Botany—Three months.	Materica Medica and Therapeutics — One session.
	Botany—Three months.
	Forensic Medicine—Three months.
Surgical practice of a hospital—12 months.	*Medical* practice of a hospital -18 months.
The lectures to occupy two winter, and one summer session.	These lectures to be attended in a certain order, and to occupy three winter, and two summer, sessions.

Such, Sir, are the different qualifications requisite: a single glance suffices to show which course of study affords the candidate the more useful and available knowledge in the necessities of everyday practice, as well as which embraces the more extended range of scientific acquirements. I should add, that the regulation requiring attendance on lectures on midwifery by the College of Surgeons is practically a dead letter, the candidate's knowledge of the subject never being tested by examination; and that, although the Apothecaries' Society do not require attendance on surgical lectures, the student, at his examination for the license, is expected to answer questions on that subject; such, indeed, being often more severe than the questions proposed by the College of Surgeons for their *higher grade of Fellow*. After an acquaintance with these facts, Mr. Editor, is it not extraordinary, to say the least, that in a recent attempt at medical legislation, a deliberate trial should have been made to deprive the legally-qualified apothecary of the universally-adopted title of surgeon? For the future, however, we shall possess in the Institute, a body ever on the alert to watch the attempts of such so-called medical reformers. To the care of that body I leave the subject, with all confidence in their integrity and ability.

A GENERAL PRACTITIONER.

EFFECTS OF HYDRO-SULPHURET OF AMMONIA ON THE BLOOD.

SIR,—The last number of your periodical contains an article headed, "Researches on the Human Blood" (by M. Bonnet, of Lyons), the concluding paragraph of which is as follows:—

"M. Bonnet has further remarked, that the hydro-sulphuret of ammonia destroys the globules completely, and deprives the blood of the faculty of assuming the bright scarlet colour of arterialisation." (See page 421.)

In June, 1843, you published a communication from me, in which are to be found the following inquiries:—

"Would it not, then, be of importance if any means could be suggested whereby the red globules alone might be diminished, while the other constituents of the blood remained unaffected? Could this be accomplished by the hydro-sulphuret of ammonia?" (See *Medical Times*, vol. viii., p. 201.)

I then proceeded to express my belief in the two-fold possibility that such end might be effected, and that the hydro-sulphuret of ammonia might be possessed of the power of depriving the red globules of an essential constituent—"appropriating to itself a portion of that iron which would otherwise have contributed to the formation of the red globules."

My grounds for such belief were, conjointly, the known affinity between iron and sulphur; the observed effects of hydro-sulphuret of ammonia on the economy; and the supposed function of iron in the globules?

Your very obedient servant,

HENRY FREKE.

Stevens's Hospital, Dublin, Sept. 2.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Gentlemen admitted members September 3:—George Todd, William Lewis Dudley, Robert Farrer.—Sept. 10: William Forster Fotherby, Edward Lowe Webb, William Edward Wright, Gordon Kenmure Hardie, George Burnside Bryden, William Hankes Day.

WAR OFFICE, September 11.—1st Regiment of Foot—Staff Surgeon of the Second Class Alexander Knox, M.D., to be Surgeon, vice Carson, who exchanges. 3rd West India Regiment—William Browne, gent., to be Assistant-Surgeon, vice Thompson, appointed to the 85th Foot.

MORTALITY TABLE.

For the Week ending Saturday, Sept. 19, 1846.

Causes of Death.	Total.	Average of 5 summers.	Average of 5 years.
ALL CAUSES	944	898	968
SPECIFIED CAUSES...	943	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	200	201	188
SPORADIC DISEASES.			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	96	99	104
Diseases of the Brain, Spinal Marrow, Nerves, and Senses..............	158	155	157
Diseases of the Lungs and of the other Organs of Respiration	219	227	204
Diseases of the Heart and Blood-vessels........	28	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	106	87	72
Diseases of the Kidneys, &c.	11	[illegible]	7
Childbirth, Diseases of the Uterus, &c.	8	9	10
Rheumatism, Diseases of the Bones, Joints, &c. ...	12	0	7
Diseases of the Skin, Cellular Tissue, &c.	6	1	2
Old Age	42	52	67
Violence, Privation, Cold, and Intemperance.........	62	26	26

No. **SUMMARY.** Sept. 20

STUDENTS' NUMBER.

THE RULES AND REGULATIONS OF EXAMINING MEDICAL BODIES IN ENGLAND, SCOTLAND, IRELAND, AND FRANCE.

UNIVERSITY OF LONDON.

EXAMINERS. -*Faculty of Medicine. Intellectual Philosophy, Logic, and Moral Philosophy*, Rev. Henry Alford, M.A., T. B. Burcham, Esq., M.A. *Medicine*, Arch. Billing, M.D., Alexander Tweedie, M.D., F.R.S. *Surgery*, John Bacot, Esq., Sir Stephen L. Hammick, Bart. *Anatomy and Physiology*, Francis Kiernan, Esq., F.R.S., Professor Sharpey, M.D., F.R.S. *Physiology and Comparative Anatomy*, Professor Rymer Jones, F.R.S. *Midwifery*, Edw. Rigby, M.D. *Chemistry*, W. T. Brande, Esq., F.R.S. *Botany*, Rev. Professor Henslow, M.A. *Materia Medica and Pharmacy*, Jonathan Pereira, M.D., F.R.S. *Forensic Medicine*, W. T. Brande, Esq., F.R.S., Edw. Rigby, M.D., Jonathan Pereira, M.D., F.R.S.

Examinations for the Degree of Bachelor of Medicine.—Candidates for the degree of Bachelor of Medicine shall be required, 1. To have been engaged during four years in their professional studies at one or more of the institutions or schools recognised by this university. 2. To have spent one year at least of the four in one or more of the recognised institutions or schools in the United Kingdom. 3. To pass two examinations.

The first examination shall take place once a year, and commence on the first Monday in August. No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—1. Of having completed his nineteenth year. 2. Of having taken a degree in arts in this university, or in a university the degrees granted by which are recognised by the senate of this university; or of having passed the matriculation examination. 3. Of having been a student during two years at one or more of the medical institutions or schools recognised by this university, subsequently to having taken a degree in arts, or passed the matriculation examination. 4. Of having attended a course of lectures on each of four of the subjects in the following list:—Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathological Anatomy, Chemistry, Botany, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Midwifery and Diseases peculiar to Women and Infants, Surgery, Medicine. 5. Of having dissected during nine months. 6. Of having attended a course of Practical Chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulteration of articles of the materia medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 7. Of having attended to practical pharmacy during a sufficient length of time to enable him to acquire a practical knowledge in the preparation of medicines.

These certificates must be transmitted to the registrar at least fourteen days before the commencement of the examination. The fee for this examination is five pounds. No candidate can be admitted to the examination unless he have previously paid this fee to the registrar; and if he fail to pass the examination, the fee will be returned to him.

The candidates are examined in the following subjects:—Anatomy, Physiology, Chemistry, Structural and Physiological Botany, Materia Medica, and Pharmacy.

The examinations are conducted in the following order:—Morning, 10 to 1: Monday, Anatomy and and Physiology, by printed papers; Tuesday, Chemistry, by experiment and printed papers. Afternoon, 3 to 6: Monday, Anatomy and Physiology, by printed papers; Tuesday, Botany, Materia Medica, and Pharmacy, by printed papers. To commence on Friday at 10. Chemistry, Materia Medica, and Pharmacy, by *viva voce*, and demonstration from specimens. To commence on Monday, in the following week, at 10: Anatomy and Physiology, by *viva voce*, demonstration from preparations, and dissection.

On the Wednesday morning in the week following the commencement of the examination, the examiners will arrange, in two divisions, each in alphabetical order, such of the candidates as have passed: and a pass certificate, signed by the registrar, will be delivered to each candidate. Such candidates only as in the opinion of the examiners are admissible to the examination for honours, shall be placed in the first division.

Examination for Honours.—Any candidate who has been placed in the first division at the first examination, may be examined for honours in any or all of the following subjects:—Anatomy and Physiology (candidates may illustrate their answers by sketching the parts they describe), Chemistry, Materia Medica, and Pharmaceutical Chemistry.

These examinations take place in the week following the commencement of the first examination. They are conducted by means of printed papers; but the examiners are not precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation. The examinations for honours are conducted in the following order:—Morning 10 to 1: Thursday, Anatomy and Physiology; Friday, Chemistry. Afternoon, 3 to 6: Thursday, Anatomy and Physiology; Friday, Materia Medica and Pharmaceutical Chemistry.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Anatomy and Physiology, the candidate who shall distinguish himself the most in Chemistry, and the candidate who shall distinguish himself the most in Materia Medica and Pharmaceutical Chemistry, shall each receive an exhibition of thirty pounds per annum for the next two years. Under the same circumstances, the first and second candidates in each subject shall each receive a gold medal of the value of five pounds.

Second Examination.—The second examination takes place once a year, and commences on the first Monday in November. No candidate can be admitted to this examination within two academical years of the time of his passing the first examination, nor unless he have produced certificates to the following effect:—1. Of having passed the first examination. 2. Of having, subsequently to having passed the first examination, attended a course of lectures on each of two of the subjects comprehended in the foregoing list, and for which the candidate had not presented certificates at the first examination. 3. Of having, subsequently to having passed the first examination, dissected during six months. 4. Of having conducted at least six labours. (Certificates on this subject will be received from any legally-qualified practitioner in medicine.) 5. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months, and lectures on clinical surgery. 6. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months, and lectures on clinical medicine. 7. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to practical medicine in a recognised hospital, infirmary, or dispensary, during six months. (Certificates on this subject will be received from any legally-qualified practitioner having the care of the poor of a parish.) The candidate must also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended.

The certificates must be transmitted to the registrar at least fourteen days before the examination begins. The fee for this examination is five pounds.

Candidates are examined in the following subjects:—Physiology (the papers in Physiology including questions in Comparative Anatomy), General Pathology, General Therapeutics, Hygiene, Surgery, Medicine, Midwifery, Forensic Medicine. The examination is conducted in the following order:—First Week. By printed papers. Morning, 10 to 1: Monday, Physiology; Tuesday, Surgery; Wednesday, Midwifery. Afternoon, 3 to 6: Monday, General Pathology, General Therapeutics, and Hygiene; Tuesday, Medicine; Wednesday, Forensic Medicine.—Second Week. By *viva voce* interrogation. To commence on Monday morning at 10.

On the Monday morning in the following week, the examiners will arrange, in two divisions, each in alphabetical order, such of the candidates as have passed; and a certificate under the seal of the university, and signed by the chancellor, will be delivered to each candidate. Such candidates only as in the opinion of the examiners are admissible to the examination for honours, will be placed in the first division.

Examination for Honours.—Any candidate who has been placed in the first division at the second examination, and has produced a certificate showing that he has not completed his twenty-fifth year, may be examined for honours in any or all of the following subjects:—Physiology and Comparative Anatomy (candidates may illustrate their answers by sketching the parts they describe), Surgery, Medicine, Midwifery, Structural and Physiological Botany.

The examination for honours will take place in the week following the second examination. It will be conducted by means of printed papers; but the examiners are not precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation. The examination is conducted in the following order:—Morning, 10 to 1: Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine; Friday, Midwifery. Afternoon, 3 to 6: Tuesday, Physiology and Comparative Anatomy; Wednesday, Surgery; Thursday, Medicine; Friday, Structural and Physiological Botany.

If in the opinion of the examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Physiology and Comparative Anatomy, the candidate who shall distinguish himself the most in Surgery, and the candidate who shall distinguish himself the most in Medicine, shall each receive an exhibition of fifty pounds per annum for the next two years, with the style of University Medical Scholar. Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a gold medal of the value of five pounds. Under the same circumstances, the candidate who shall distinguish himself the most in Midwifery, and the candidate who shall distinguish himself the most in Structural and Physiological Botany, shall each receive a gold medal of the value of five pounds.

Examination for the Degree of Doctor of Medicine.—The examination for the Degree of Doctor of Medicine takes place once a year, and commences on the fourth Monday in November. No candidate can be admitted to this examination unless he have produced certificates to the following effect:—1. Of having taken the degree of Bachelor of Medicine in this university, or a degree in medicine or in surgery at a university, the degrees granted by which are recognised by the senate of this

university. Those candidates who have not taken the degree in this university shall produce a certificate of having completed their twenty-third year. 2. Of having attended, subsequently to having taken one of the above degrees in medicine, (*a*) to clinical or practical medicine during two years in a hospital or medical institution recognised by this university; (*b*) or, to clinical or practical medicine during one year in a hospital or medical institution recognised by this university, and of having been engaged during three years in the practice of his profession; (*c*) or, if he have taken the degree of Bachelor of Medicine in this university, of having been engaged during five years in the practice of his profession. (One year of attendance on clinical or practical medicine, or two years of practice, will be dispensed with in the case of those candidates who, at the second examination, have been placed in the first division.) 3. A moral character, signed by two persons of respectability.

These certificates must be transmitted to the registrar at least fourteen days before the examination begins. The fee for the degree of Bachelor of Medicine is ten pounds.

Candidates are examined in the following subjects:—Elements of Intellectual Philosophy, Logic, and Moral Philosophy; Medicine. The examinations are conducted in the following order:—By printed papers. Morning, 10 to 1. *Monday*, Elements of Intellectual Philosophy, Logic, and Moral Philosophy. (Candidates who have taken a degree in arts in this university, or in a university, the degrees granted by which are recognised by the senate of this university, are exempted from this part of the examination. The degrees in arts of all universities in the United Kingdom are recognised by the senate for this purpose.) *Tuesday*, Medicine. Afternoon, 3 to 6. *Monday*: A Commentary on a Case in Medicine, Surgery, or Midwifery, at the option of the candidate. *Tuesday*, Medicine. —By *viva voce* interrogation. *Friday* Morning, at 10. Examination on the answers to the Printed Papers, and on the Commentaries; and the examination for a certificate of Special Proficiency in Medicine, Surgery, or Midwifery, as determined by the candidate's choice of the case for commentary.

On the Monday morning in the following week, the examiners will arrange in two divisions, each in alphabetical order, such of the candidates as have passed; and a certificate under the seal of the university, and signed by the chancellor, will be delivered to each candidate. Such candidates only as, in the opinion of the examiners, are admissible to the examination for honours, will be placed in the first division. If, in the opinion of the examiners, sufficient merit be evinced, the author of the best Commentary on the Case in Medicine, the author of the best Commentary on the Case in Surgery, and the author of the best Commentary on the Case in Midwifery, will each receive a gold medal of the value of five pounds. Any candidate may present a thesis on a subject of his own choice. If in the opinion of the examiners, sufficient merit be evinced, a gold medal, of the value of ten pounds, will be given to the author of the best thesis. The examiners are not precluded from examining the author on the subject of his thesis.

Examination for Honours.—Any candidate who has been placed in the first division may be examined for honours in any or all of the following subjects:—Surgery, Medicine, Midwifery. The examinations take place in the week following. They are conducted by means of printed papers; but the examiners are not precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation.

The examinations for honours are conducted in the following order:—Morning, 10 to 1: Tuesday, Surgery; Wednesday, Medicine; Thursday, Midwifery. Afternoon, 3 to 6: Tuesday, Surgery; Wednesday, Medicine; Thursday, Midwifery.

If, in the opinion of the examiners, sufficient merit be evinced, the first candidate in each subject will each receive a gold medal of the value of five pounds.

Institutions and Schools.—No medical institution or school is recognised by the senate of this university which does not possess ample means of illustrating the instruction given at it. *Forms of Certificates*: The teacher must certify for—*Lectures*,—That in the year 18 , the pupil attended . . . his course of instruction on which commenced on . . . . and terminated at . . . . . and which consisted of . . . . . lectures and . . . . examinations. *Practical Anatomy*,—That from . . . to . . . the pupil dissected . . . . . under his superintendence. *Practical Chemistry*,—That the pupil operated . . . . during his course of Practical Chemistry, which consisted of . . . . lessons. *Practical Pharmacy*,—That the pupil prepared . . . . . medicines under his superintendence from . . to . . . . *Clinical Instruction in Surgery*,—That the pupil attended . . . . . the surgical practice of this hospital, and the course of lectures on Clinical Surgery, consisting of . . . lectures, from . . . . to . . . . *Clinical Instruction in Medicine*,—That the pupil attended . . . . the medical practice of this hospital, and the course of lectures on Clinical Medicine, consisting of . . . . lectures from . . . . to . . . *Practical Medicine*,—That the pupil attended . . . . to Practical Medicine at . . . . and was intrusted with the treatment of patients under . . . . . superintendence, from . . . . to . . . (Certificates on this subject will be received from any legally-qualified practitioner, having the care of the poor of a parish.) *Practical Midwifery*,—That the pupil conducted . . . . labours under his superintendence. Any legally-qualified practitioner shall be competent to give this certificate.

Regulations relating to Students who commenced their Medical Studies in or before January, 1840.

Degree of Bachelor of Medicine.—Candidates who commenced their professional studies in or before Jan., 1840, are admitted to the first examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during two years in their professional studies. 2. Of having attended a course of lectures on each of four of the subjects comprehended in the former list. 3. Of having dissected during nine months. 4. Of having attended to practical pharmacy during a sufficient length of time to enable them to acquire a practical knowledge in the preparation of medicines.

Candidates who commenced their professional studies in or before January, 1840, are admitted to the second examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during four years in their professional studies. 2. Of having passed the First Examination. 3. Of having attended a course of lectures on each of two of the subjects comprehended in the former list. 4. Of having dissected during twelve months. 5. Of having attended to practical pharmacy during a sufficient length of time to enable the pupil to acquire a practical knowledge in the preparation of medicines. 6. Of having conducted at least six labours. 7. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months. 8. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months. 9. Of having completed the twenty-second year of their age. 10. Of moral character, from a teacher in the last school or institution at which they have studied, as far as the teacher's opportunity of knowledge has extended.

Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this university, will be required to translate a portion of CELSUS *de Re Medicâ*.

Regulations relating to the Practitioners in Medicine or Surgery desirous of obtaining Degrees in Medicine.

Degree of Bachelor of Medicine.—Candidates are admitted to the two examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been admitted, prior to the year 1840, members of one of the legally-constituted bodies in the United Kingdom for licensing practitioners in medicine or surgery, or of having served, previously to 1840, as surgeons, or assistant-surgeons, in her Majesty's Army, Ordnance, or Navy, or in the service of the Honourable the East India Company. 2. Of having received a part of their education at a recognised institution or school, as required by the charter of the university. 4. Of moral character, signed by two persons of respectability.

Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this university, will be required to translate a portion of CELSUS *de Re Medicâ*.

Degree of Doctor of Medicine.—Candidates who have been engaged during five years in the practice of their profession, may be admitted to the examination for this degree on producing certificates to the following effect:—1. Of having been engaged during five years in the practice of their profession. 2. Of having taken the degree of Bachelor of Medicine in this university.

Candidates who have not taken a Degree in Arts or passed the Matriculation Examination in this university, will be required to translate a portion of CELSUS *de Re Medicâ*.

The regulations respecting the transmission of the certificates to the registrar, the fees, the periods, and the mode of conducting the examinations, and the arrangement of the candidates after examination, are the same for all candidates for the same degrees.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

According to the regulations of this College, no one will be admitted as a candidate for the license, unless he shall have attained the age of six-and-twenty, and shall present a certificate of good moral conduct. His medical education must comprise Anatomy, the Theory and Practice of Medicine, Forensic Medicine, Chemistry, Materia Medica, Natural History, principally Botany, Midwifery, and the principles of Surgery, and must extend over the period of five years. Practical Medicine must be studied for three years in a hospital containing at least 100 beds, and having a complete staff of physicians and surgeons. Those who have studied abroad, in addition to giving proof of five years' medical education according to the usual course of study, are required to present testimonials of a twelvemonth's medical practice at any hospital in Great Britain, having the qualifications as above.

No one will be admitted as a Licentiate (*Permissus*) who is accustomed to use any secret medicine or nostrum in the treatment of disease, unless, previously to his first examination, he make known to the president and censors its composition and the manner in which it is employed. Every Candidate must undergo three examinations, each conducted at different times, before the president and censors in *comitia minora*. The first examination comprises Physiology, the second Pathology, and the third Therapeutics. After the first examination, the president may inquire of the candidate where he studied polite literature and the principles of science, and what honours he has obtained, whether in Philosophy, Arts, or Medicine, in order that the answers may be recorded by the registrar. The candidate will also be examined in Greek works on medicine, to wit, Hippocrates, Galen, or Aretæus. Passages from the aphorisms of Hippocrates or Galen will be brought forward during the first examination; and during the second and third, passages from Hippocrates, Galen, or Aretæus, which must be translated into Latin, and illustrated with a brief commentary. If the candidate be deficient in his knowledge of Greek, he will be required to translate parts of Celsus or Sydenham, or some other Latin work on Medicine, into English. The examinations are conducted in Latin or English at the pleasure of the censors.

Whenever a candidate has passed the prescribed examinations, and has been approved, he will be proposed at the next *comitium majus* (a meeting of the Fellows at large) to be admitted as a licentiate; and, if the majority present consent, he will be admitted accordingly. If, however, the candidate be rejected, he cannot present himself for re-examination for a twelvemonth.

Before the licentiate is admitted, he is required to plight his faith to the College according to a formula, pronounced by the President before the Fellows assembled in *comitium majus*.

If any one holding the license of the College practise Pharmacy afterwards, or engage in merchandise, he is liable to expulsion; and any person practising medicine in London, or within seven miles thereof, without having previously obtained the collegiate license, is to be admonished by letter to cease his practice, until after he has passed the required examinations; and, if he continues to practise, despite this admonition, then *legibus regni obnoxius erit.*

Persons who have attained their fortieth year, seeking to become Licentiates of the College, but whose medical education is not altogether in accordance with the regulations already stated, must present testimonials of professional knowledge and good moral conduct, and if these are satisfactory, they will be admitted to examination, the same as for licentiates in general.

The old regulation restricting the fellowship, as a matter of right, to the graduates of Oxford, Cambridge, and Trinity College, was repealed in the latter part of 1835; and after Easter, 1836, all candidates were declared to be admissible as licentiates only, from which class, when duly qualified, a certain number are to be annually elected fellows in *comitia majora.* The advantages derived by graduates of the English universities, and by the Irish graduate who possesses an *ad eundem* degree from an English university, is, that they are eligible a year after they have obtained the licence; the Scotch graduate, being M.A. or B.A., five years later. If the latter does not possess any degree in arts, his eligibility for the fellowship does not occur until after the lapse of seven years. The Irish graduates who do not possess an *ad eundem* degree are not eligible for two years after they are licensed. The president and censors propose the candidates for the fellowship, but the *comitia majora* may reject the proposition, and choose their nominees. The election is by ballot.

The president of the college is *ex-officio* president of the Vaccine Board, a trustee of the British and Hunterian Museum, physician to the Queen, and an elector to the Tancred scholarships. The college has the power of recommending a physician to Christ Church, St. Thomas's, and St. Bartholomew's Hospitals; but if the recommendation succeed, it is then required to pay an annual stipend of £30 or £40 to the physician. The college also appoints the professor of botany to the University of Oxford.

The examinations for the license are conducted by the president and censors. The periods at which they take place are Michaelmas, Christmas, Easter, and in the month of June. The new censors are elected on the 24th of June, when the Harveian oration is delivered. The lectures are delivered in the early part of the year. There are about fifteen delivered; three Gulstonian, three Croonian, and three Lumleian, so called from the names of those who left endowments to the college for the purpose, and six lectures on Materia Medica. The museum and library are attached to the institution, to which the fellows, and, by permission, their friends, have access.

The president may each year propose one candidate for the license, he being an M.D., but not otherwise eligible; and he may also name annually a licentiate of ten years' standing for the fellowship. The fellows have also the power of proposing a licentiate of seven years' standing, who is thirty-six years of age, for the fellowship; but this has been done so rarely as to be, in fact, obsolete.

The college fees are £56 17s. for the license; the fellow pays in addition, £1 1s. annually to the collegiate fund.

If any fellow or licentiate can be proved, to the satisfaction of the president and censors, to have wilfully accused any other fellow or licentiate of professional ignorance, &c., unless it be before the legally-constituted judges, he shall be fined £4 for the first offence, and £8 for the second; if he offend a third time, if a fellow, he shall be expelled, and if a licentiate fined £10. This last fine is to be enforced every time afterwards the licentiate shall so offend. If any fellow or licentiate shall offer his professional assistance to any patient whom he shall know to be under the care of another physician, whether fellow or licentiate, without having been called in to see the patient professionally, he shall be fined 40s.

If any fellow be proved to have made any arrangement with a druggist, to share with him the proceeds in his prescriptions, he shall be expelled; if a licentiate have entered into a similar arrangement, he shall be fined £10 every time he shall so offend.

Every physician, whether fellow or licentiate, shall attach to each prescription which he writes the day of the month, the name of the sick man, and his own initials. When a consultation takes place, it is to be carried on with modesty, not in the presence of the sick; and if any difference of opinion occurs, it is to be stated with prudence and moderation, so that it may not be noticed by the patient or the friends, but, if requisite, should be mentioned by the ordinary medical attendant. Whoever infringes these regulations will be fined £5 by the president and censors.

No fellow or licentiate may consult, in London, or within seven miles thereof, with a physician who does not belong to the college, under a penalty of £5 fine.

All fines are to be paid immediately.

The president and court of the college have the power of committing individuals condemning their authority to Newgate. This power has been exercised by the court, but not of late years.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

New Regulations for Candidates for the Fellowship of the Royal College of Surgeons of England.

1. That every candidate for the fellowship, whether a member of the college or not, shall produce certificates satisfactory to the court of examiners,—

That he is twenty-five years of age.

That he is (if found qualified upon his examination) a fit and proper person to be admitted to the fellowship, and the certificate of which shall be signed by three fellows.

That he has attained a competent knowledge of the Greek, Latin, and French languages, and of the elements of mathematics.

That he has been engaged for six years in the acquirement of professional knowledge in recognised hospitals or schools of surgery and medicine within the United Kingdom of Great Britain and Ireland, or in foreign countries, and that three of such years at least have been passed in one or more of such recognised hospitals or schools in London.

That he has attended the surgical practice of a recognized hospital or hospitals during four years, and the medical practice of a recognised hospital or hospitals for one year.

That he has studied anatomy and physiology by attendance on lectures and demonstrations, and by dissections, during three winter sessions of not less than six months each, at one or more recognised school or schools.

That he has attended lectures on the theory and practice of medicine, and on clinical medicine, and also on the theory and practice of surgery, and on clinical surgery, during two sessions of six months each, at one or more recognised school or schools.

That he has attended one course of lectures on each of the following subjects, viz.: chemistry, materia medica, midwifery, medical jurisprudence, and comparative anatomy, at one or more recognised school or schools. And that he has served the office of house-surgeon or dresser in a recognised hospital in the United Kingdom. Every such candidate (except in the case and instances hereinafter provided for to the contrary) shall also present for examination clinical reports, with observations of six or more surgical cases taken by himself at a recognised hospital or recognised hospitals within the United Kingdom, with sufficient certificates of their authenticity and genuineness, and shall leave such reports at the college.

3. That as to any candidate, who shall have taken the degree of bachelor of arts in an English university, and shall produce satisfactory evidence thereof, it shall, instead of the certificate or certificates that he has been engaged for six years in the acquirement of the professional knowledge as before mentioned, be sufficient for him to produce a satisfactory certificate or certificates that he has been engaged for five years in the acquirement of professional knowledge in recognised hospitals and schools of surgery and medicine within the United Kingdom, or in foreign countries, and that three of such years at least have been passed in one or more of the recognised hospitals or schools of London; and that it shall not be necessary for any candidate having so taken the degree of bachelor of arts to produce any certificate of his having acquired a competent knowledge of the Greek, Latin, and French languages, and of the elements of mathematics.

4. That upon the 1st day of January, 1850, or at any earlier period which may be thought proper, the council shall, under such regulations, and for such time or period as to them shall seem proper (but always subject to removal at the pleasure of the council), appoint three persons, and being, or not being, and either all, or in part, members of the college, as the council shall think proper for the purpose of examining persons intending to become candidates for the fellowship, and required to be examined in the Greek, Latin, and French languages, and in the elements of mathematics; and the said council, from time to time after the first appointment of such persons for such purpose as aforesaid, and as often as shall be necessary, or to the said council shall seem proper in their behalf, shall appoint such other person and persons as to them shall seem fit and proper to succeed or supply the place or places of any person or persons previously appointed for such purpose; and that, from and after the first appointment of any such persons for the purpose of making such examination as aforesaid, no certificate of a candidate having competent knowledge of the Greek, Latin, and French languages, and of the elements of mathematics, shall be received or allowed by the court of examiners, except the certificate or certificates of the persons for the time being so appointed as aforesaid.

5. That all members of the college, future as well as present, shall be entitled to be admitted to the examination for the fellowship according to the foregoing by-laws and ordinances.

6. That any person who shall have been a member of the college on the 14th day of September, 1844, shall, after the expiration of eight years from the date of his diploma, also be entitled to be admitted to the examination for the fellowship upon the production of a certificate signed by three fellows that he has been eight years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow, if upon examination he shall be found qualified.

7. That any person who shall have become a member of the college after the said 14th day of September, 1841, shall, after the expiration of twelve years from the date of the diploma, also be entitled to be admitted to the examination for the fellowship upon the production of a certificate signed by three fellows that he has been for twelve years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow, if upon examination he shall be found qualified, and also if he have not taken the degree of Bachelor of Arts in an English university, of a certificate or certificates that he has a competent knowledge of the Greek, Latin, and French languages, and of the elements of mathematics.

EXAMINATION OF CANDIDATES FOR THE FELLOWSHIP.

1. The examination for the fellowship shall be held three times in the year, at or within such periods as the council shall from time to time determine.

2. Each candidate shall be examined on two days, either successive or at such an interval as the Court of Examiners may appoint.

3. The subjects for the first day's examination shall be anatomy and physiology; those of the second pathology, therapeutics, and surgery.

4. The time allowed for examination each day shall be from ten o'clock in the forenoon until five o'clock in the afternoon.

5. The examination shall be conducted in the following manner. Each candidate shall, upon going in for examination, have delivered to him a written or printed copy of such questions as shall have been previously determined upon by the Court of Examiners, and to which questions he shall give written answers, and which answers shall be considered by the Court of Examiners.

The court may, however, if they should think fit, interrogate any candidate on any matters connected with the questions or answers. In the anatomical examination, the candidate shall also perform dissections and operations on the dead body in the presence of the Court of Examiners, or of such members thereof as may be deputed by the court to superintend the same. Candidates whose qualification shall be found insufficient shall not be allowed to present themselves a second time until after the expiration of one year from their first examination.

The Court of Examiners shall report in writing to the council the names of such persons as they shall have found upon examination to be qualified for the fellowship.

‚ Members of the college will pay ten guineas besides charges for status, and non-members thirty guineas.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma who commenced their Studies before the year 1838.

1. Candidates will be required to bring proof—1. Of being twenty-two years of age. 2. Of having been engaged five years in the acquirement of professional knowledge. 3. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons. 4. Of having attended at least two courses of lectures on surgery, delivered in two distinct periods or seasons; each course to comprise not less than sixty lectures. 5. Of having attended lectures on the practice of physic, on chemistry, and on midwifery, during six months, comprising not less than sixty lectures respectively, and on botany and materia medica, during three months. 6. Of having attended during twelve months the surgical practice of a recognised hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or, for six months, in any one of such hospitals, and twelve months in any recognised provincial hospital.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma after the Termination of the Session 1839-1840.

1. Candidates will be required to bring proof—1. Of being not less than twenty-one years of age. 2. Of having been engaged in the acquirement of professional knowledge for not less than four years, three of which shall have been passed in a recognised school or schools of surgery; three months of vacation being allowed in each year, and in the event of absence or absences from such school or schools during the said term of three years (exclusive of the vacations), the full term being completed in a subsequent year. 3. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during two anatomical seasons. 4. Of having attended at least two courses of lectures on surgery, delivered in two distinct periods or winter seasons of six months, each course to comprise not less than seventy lectures. 5. Of having attended one course of lectures on the practice of physic, and one on chemistry, during six winter months, comprising not less than seventy lectures respectively; one course on materia medica with medical botany during six months, and one on midwifery during six months, each comprising not less than sixty lectures; and at least twenty-five lectures on medical jurisprudence. Certificates of attendance on these lectures during the summer season will be received, provided they are equally divided over a period of four months. The lectures on medical jurisprudence may be delivered three days in the week. 6. Of having attended, during twenty-one months, the surgical practice of a recognised hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or for twelve months in any one of such hospitals, and twelve months in any recognised provincial hospital. 7. Of having attended the medical practice of a hospital or dispensary during six months.

II. Members and licentiates in surgery of any legally constituted college of surgeons in the United Kingdom, and graduates in surgery of any university, requiring residence to obtain degrees, will be admitted for examination on producing their diploma, licence, or degree, together with proofs of being twenty-two years of age, and of having been occupied five years in the acquirement of professional knowledge.

N.B. Certificates will not be recognised from any hospital unless the surgeons thereto, or a majority of them, be members of one of the legally constituted colleges of surgeons in the United Kingdom; nor from any school of anatomy, physiology, or midwifery, unless the respective teachers be members of some legally constituted college of physicians or surgeons in the United Kingdom; nor from any school of surgery, unless the respective teachers be members of some legally constituted college of surgeons in the United Kingdom. Certificates will not be received on more than two branches of science, from one and the same lecturer; but anatomy and physiology—demonstrations and dissections—materia medica and botany—will be respectively considered as one branch of science.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma. August 15, 1843.

1. Candidates will be required, in addition to a certificate of being not less than twenty-one years of age, to bring proof—1. Of having been engaged in the acquirement of professional knowledge for not less than four years; during which period they must have studied practical pharmacy for six months, and have attended one year on the practice of physic, and three years on the practice of surgery, at a recognised hospital or hospitals in the United Kingdom; —three months being allowed for a vacation in each year. (By a resolution of the council, on the 7th of November, 1839, no provincial hospital will, in future, be recognised by this college which contains fewer than 100 patients, and no metropolitan hospital which contains fewer than 150 patients.) 2. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during three winter sessions, of not less than six months each. 3. Of having attended at least two courses of lectures on the principles and practice of surgery, delivered in two distinct periods or seasons; and one course on each of the following subjects—viz., the practice of physic, chemistry, and materia medica, and midwifery with practical instruction.

Certificates will not be received unless the candidate have duly registered his tickets. The other regulations are virtually the same as before.

These three forms of regulations are in force respecting candidates for the diploma, according to the period when they commenced their studies.

Fee for the diploma (including stamp), £22; for an articled student (allowed in the diploma fee), £10 10s.; for a certificate of having had the diploma, £5 5s.; for being enfranchised, £10 10s.; a certificate for a surgeon in the Royal Navy, or East India Company's service (allowed in diploma fee), £5 5s.; for an assistant surgeon, £2 2s.; for a candidate calling a special court, £5 5s.

Studentships in Anatomy.—Three studentships in human and comparative anatomy have been instituted by the college, to be held by each student for the term of three years, at a salary of one hundred pounds per annum. And with the view of promoting the objects of the college, in the institution of these studentships, the commander-in-chief of the army, the lords commissioners of the admiralty, and the court of directors of the East India Company, have placed at the disposal of the president and the council an assistant surgeoncy in each service, once in three years, for such of the said students as may be considered worthy of these honourable distinctions. 2. Candidates to be members of the college, under twenty-six years of age. 3. The council will determine annually whether one or more of such appointments shall take place during the current year, and will notify its resolution by public advertisement. 4. The appointment is made in the month of June, or as soon after as possible. 5. The students are subject to such duties and restrictions as the council shall from time to time direct; and in case of misconduct are liable to dismissal. 6. Candidates are required to transmit to the secretary, on or before the 1st of May, their applications for the appointment, together with certificates of general good character, and of fair acquirements in general learning, signed by two qualified members of the medical profession. 7. A meeting of the museum committee will be held as soon after the 1st of May as conveniently may be, at which the applications of the persons offering themselves will be examined, and, if approved, the applicants will be admitted as candidates. 8. The museum committee will determine the merits of the several candidates, and report to the council which, in their opinion, possess the highest merit. 9. The students are required to attend in the museum daily (Sundays excepted), from ten till four o'clock, and are under the immediate direction of the museum committee.

JACKSONIAN prizes of twenty guineas. The prize for the year 1845 is Tumours of the Uterus and its Appendages, their Structure, Pathology, and Treatment.

Candidates to be members of the college, not of the council.

The dissertations to be in English; and the number and importance of *original facts* will be considered principal points of excellence. Recited cases to be placed in an appendix.

Each dissertation to be distinguished by a motto or device; and accompanied by a sealed paper, containing the name and address of the author, and having, on the outside, a motto or device corresponding with that on the dissertation.

The dissertations to be addressed to the secretary, and delivered at the college before Christmas-day, 1845.

The manuscript prize dissertations, and every accompanying drawing and preparation, will become the property of the college.

Those dissertations which shall not be approved, with their accompanying drawings and preparations and correspondent sealed papers, will be returned upon authenticated application within the period of three years; and those manuscripts which shall remain three years unclaimed, and every accompanying drawing and preparation, will become the property of the college; at which period their accompanying papers, containing the names of the respective authors, will be burned, unopened.

The subject of the COLLEGIAL Triennial Prize of Fifty Guineas is, the Anatomy of the Fibres of the Cerebrum, Cerebellum, and Spinal Cord in the Human Subject; together with the origin of the Cerebral, Spinal, and Sympathetic Nerves; specially illustrated by the Anatomy of the same Parts in the lower Vertebrate Animals.

Candidates to be members of the college, not of the council.

The dissertations to be in English, and to be distinguished by a motto or device, accompanied by a sealed paper, containing the name and residence of the author, and having on the outside a motto or device corresponding with that on the dissertation.

The dissertations to be addressed to the secretary, and delivered at the college before Christmas-day, 1845.

The manuscript prize essay, with every accompanying drawing and preparation, will become the property of the college; the other dissertations and their corresponding sealed papers will be returned, upon authenticated application within the period of three years; after which period, the papers containing the names of the respective authors will be burned, unopened, and the manuscripts will become the property of the college.

The *museum* is opened to visitors on Monday, Tuesday, Wednesday, and Thursday, from 12 till 4, except during the month of September; on Friday to gentlemen for studying in it; and on Saturday,

from 10 till 1, to gentlemen desirous of comparing specimens with those in the museum. The *library* is open to members and students of the college, and visitors having tickets of admission, daily (Sundays excepted), from the 1st of October to the 1st of April, from 10 till 4; and from the 1st of April to the 1st of September, from 10 till half-past 5.

The lectures at the college by the professors are delivered in the spring of the year, the Hunterian oration on the 14th of February.

APOTHECARIES' HALL.

Every candidate for a certificate of qualification to practise as an apothecary will be required to produce tessimonials:—1. Of having served an apprenticeship of not less than five years to an apothecary. 2. Of having attained the full age of twenty-one years. 3. Of good moral conduct. 4. And of having pursued a course of medical study, in conformity with the regulations of the court.

Course of Study.

Every candidate whose attendance on lectures commenced on or after the 1st of October, 1835, must have attended the following lectures and medical practice during not less than three winter and two summer sessions: each winter session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th October; and each summer session to extend from the 1st of May to the 31st of July.

First Winter Session.—Chemistry; Anatomy and Physiology; Anatomical Demonstrations; Materia Medica and Therapeutics: this course may be divided into two parts of fifty Lectures, each one of which may be attended in the Summer.

First Summer Session.—Botany and Vegetable Physiology; either before or after the first Winter Session.

Second Winter Session.—Anatomy and Physiology; Anatomical Demonstrations; Dissections; Principles and Practice of Medicine.

Second Summer Session.—Forensic Medicine.

Third Winter Session.—Dissections; Principles and Practice of Medicine.

Midwifery, and the Diseases of Women and Children, two courses in separate sessions, and subsequent to the termination of the first Winter Session. Practical Midwifery, at any time after the conclusion of the first course of Midwifery Lectures.

Medical Practice during the full term of eighteen months, from or after the commencement of the second Winter Session; twelve months at a recognised hospital, and six months at a recognised hospital, or a recognised dispensary; in connection with the hospital attendance, a course of Clinical Lectures and instruction in Morbid Anatomy will be required.

The sessional course of instruction in each subject of study is to consist of not less than the following number of lectures:—One hundred on Chemistry—One hundred on Materia Medica and Therapeutics—One hundred on the Principles and Practice of Medicine—Sixty on Midwifery and the Diseases of Women and Children—Fifty on Botany and Vegetable Physiology.

Every examination of an hour's duration will be deemed equivalent to a lecture. The lectures required in each course must be given on separate days. The lectures on Anatomy and Physiology, and the Anatomical Demonstrations, must be in conformity with the regulations of the Royal College of Surgeons of London in every respect. Students must also produce testimonials of attendance on a course of Clinical Lectures; of instruction in Practical Chemistry and Morbid Anatomy; and of having dissected the whole of the human body once at least; without which testimonials the candidate cannot be admitted to examination.

The above course of study may be extended over a longer period than three winter and two summer sessions, provided the lectures and medical practice are attended in the prescribed order and in the required sessions.

Those gentlemen whose attendance on lectures commenced before the 1st of October, 1835, will be allowed to complete their studies in conformity with the previous regulations of the court.

No member of the court of examiners will be recognised as a lecturer on any branch of Medical Science. The court will not recognise any lecturer unless he lectures in connection with a recognised medical school; nor will they recognise a lecturer on more than *two* branches of medical science; nor until he has produced very satisfactory testimonials of his attainments in the science he purposes to teach, and of his ability as a teacher thereof, from at least two persons of acknowledged talents and distinguished acquirements in the particular branch of science in question; and also given a public course of lectures on the subject he purposes to teach; but if, after such preliminary course, the lecturer shall be recognised, certificates of attendance on that course will be received.

Satisfactory assurance must also be given that the teacher is in possession of the means requisite for the full illustration of his lectures, viz, that he has, if lecturing—On Chemistry, a laboratory and competent apparatus—On Materia Medica, a museum sufficiently extensive—On Botany, a hortus siccus, plates or drawings, and recent plants—On Midwifery, a museum, and such appointments in a public institution as may afford the means of practical instruction to the pupils.

No hospital will be recognised by the court unless: 1. It contain at least one hundred beds. 2. It be under the care of two or more physicians, members of the Royal College of Physicians of London, or graduated doctors of medicine of a British university. 3. The physicians give a regular course of clinical lectures and instruction in Morbid Anatomy. 4. The apothecary be legally qualified, either by having been in practice prior to the 1st of August, 1815, or by having received a certificate of qualification from this court. No dispensary will be recognised by the court unless it be situated in some town where there is a recognised medical school, and be under the care of at least two physicians and an apothecary legally qualified. No medical practice will be available unless it be attended in conformity with the course of study prescribed for pupils.

Names of Gentlemen having the Care of the Registers.

Birmingham: W. Sands Cox, Esq., Lecturer on Anatomy. Bristol: Dr. Wallis, and Henry Clark, Esq., Lecturers on Anatomy. Hull: Edward Wallis, Esq., Lecturer on Anatomy. Leeds: Thomas Nunneley, Esq., Lecturer on Anatomy. Liverpool: Dr. Malins, Medical Jurisprudence. Manchester: Thomas Turner, Esq., Anatomy. Newcastle: William Dawson, Esq., Midwifery. Sheffield: W. Jackson, Esq., Anatomy. York: John Hopps, Esq., Anatomy.

Registration of Testimonials.

All testimonials must be given on a printed schedule (a), with which students will be supplied at the time of their first registration:—

In London, at this hall.

In Edinburgh, Messrs. Mac Lachlan and Stewart's, booksellers.

In Dublin, at Messrs. Hodges and Smith's, booksellers.

In the provincial towns, from the gentlemen who keep the registers of the Medical Schools.

All students in London are required *personally* to register the several classes for which they have taken tickets; and those only will be considered as complying with the regulations of the court whose names and classes in the register correspond with their schedules.

Tickets of admission to Lectures and Medical Practice must be registered in the months of October and May; but no ticket will be registered unless it be dated within *seven* days of the commencement of the course; and certificates of attendance must be registered in the months of April and August. Due notice of the days and hours of such registration will be given from time to time.

(a) It is particularly requested that the lecturer himself will fill up the blanks in the schedule, specifying the mode of attendance.

The court also require students of the Provincial Medical Schols to register their names in their own handwriting, with the registrar of each respective school, within the first twenty-one days of October, and first fourteen days of May; and to register their certificates of having duly attended Lectures on Medical Practice within fourteen days of the completion of such attendance.

The registrars are requested to furnish the court of examiners with a copy of each registration *immediately* after its close, as those students only will be admitted to examination whose registrations have been *duly* communicated to the court.

Examination.

Every person intending to offer himself for examination must give notice in writing to the clerk of the society on or before the Monday previously to the day of examination, and must at the same time deposit all the required testimonials at the office of the beadle, where attendance is given every day, except Sunday, from ten until four o'clock.

The examination of the candidate for a certificate of qualification to practise as an apothecary will be as follows:—

(a) In translating portions of the first four books of Celsus de Medicinâ, and of the first twenty-three chapters of Gregory's Conspectus Medicinæ Theoreticæ.

In Physicians' Prescriptions, and the Pharmacopœia Londinensis.

In Chemistry.

In Materia Medica and Therapeutics.

In Botany.

In Anatomy and Physiology.

In the Principles and Practice of Medicine, including Midwifery and the Diseases of Children.

The examination of the candidate for a certificate of qualification to act as assistant to an apothecary, in compounding and dispensing medicines, will be as follows:

In translating Physicians' Prescriptions, and the Pharmacopœia Londinensis.

In Pharmacy and Materia Medica.

By the 22nd section of the Act of Parliament, no rejected candidate for a certificate to practise as an apothecary can be re-examined *until the expiration of six months* from his former examination: and no rejected candidate as an assistant *until the expiration of three months*.

The court meet in the hall *every Thursday*, where candidates are required to attend at a quarter before four o'clock.

The act directs the following sums to be paid for certificates.

For London, and within ten miles thereof, ten guineas.

For all other parts of England and Wales, six guineas.

Persons having paid the latter sum become entitled to practise in London, and within ten miles thereof, by paying four guineas in addition.

For an assistant's certificate, two guineas.

By an order of the Court,
HENRY BLATCH, Sec.

Apothecaries' Hall,
Aug. 1845.

UNIVERSITY OF OXFORD.

Full term is understood to begin on the first day of the week after the congregation has been held; so that, if the congregation be held on the Monday, the Sunday after is considered the first day of full term.

According to the lately altered statute respecting medical degrees, a candidate for the degree of Bachelor in Medicine, before he can be admitted to examination for that degree, must have kept four whole years, or sixteen terms, in the university, in like manner as is required by candidates for a degree in arts (b); must have passed the examination for the degree of bachelor in arts; and subsequently to that examination must have studied medicine

(a) By an order of the court, in future the Latin language will form part of the general examination.

(b) That is, he must be of sixteen terms' standing, and have actually *resided* in the university twelve terms.

during three whole years, or twelve terms; and must also have completed seven years, or twenty-eight terms, from his matriculation.

The medical examination takes place only once in the course of the year—namely, in the second week of full Trinity term, commencing usually on the *second Tuesday* after Trinity Sunday. The candidates are examined, principally "vivâ voce," but partly in writing, in the theory and practice of medicine, in anatomy, in physiology, pathology, and materia medica; and also in chemistry and botany, as far as they elucidate the art of medicine. He is required to be conversant with the entire works of Aretæus and Celsus, the aphorisms and epidemics of Hippocrates, and that portion of Galen's writings entitled "De usu Partium;" in two, at least, of which authors the statute directs that the ex[illegible] test the candidate's attainments [illegible] must [illegible] fourteen days before the day of examin[illegible] certificates of three years' attendance [illegible] ical practice of a hospital, with the [illegible] lectures.

Certificates are required for two courses of anatomy and physiology, each extending from October till the following April or May, two courses on the theory and practice of medicine, each course of the same extent; one course in materia medica, one course in botany, one course in chemistry, provided the course extend through the usual winter session, otherwise two courses will be required.

[illegible] candidate for the degree of doctor in medicine must have pursued the study of medicine during three years after he has graduated as bachelor in medicine, and must give at least a fortnight's previous notice of his intention to the professor of medicine, at the same time submitting to approbation a subject for a medical dissertation, which dissertation must be read in the public schools of the university within a few days of taking the degree of M.D., and delivered to the professor immediately after it has been read. No graduate in medicine from another university can be incorporated at Oxford unless he produce testimonials by which it may clearly appear that he has kept by residence terms equal to those required to be so kept in this university, he has completed all the exercises prescribed by the university from which he migrates for the degree of bachelor of arts, and shall have previously undergone the medical examination above described; and shall have fulfilled all the other con[illegible] of the present statute. The fees for a bachelor of medicine are £23; for a doctor in medicine £40.

The University of Oxford is in possession of the Bodleian library (librarian, B. Bandinel, M.A.); of the Radcliffe library (librarian, Dr Kidd); of the Ashmolean museum (keeper, P. B. Du[illegible]); and of [illegible] gardens, founded by the Earl of Danby in 1632. All these are open to students under cer[illegible] restrictions.

[illegible] Dr. Radcliffe left by will an endowment of £600 per annum, to be paid to two persons to be chosen out of the University of Oxford, so that they are M.A., entered on the study of [illegible], for their maintenance for ten years, and so [illegible] the half of which time, at least, they are to [illegible] in parts beyond sea, for their better improvement. In case of vacancy, by death, or at the expiration of the ten years, a new election is to take place within six months.

UNIVERSITY OF CAMBRIDGE.

Haviland delivers a course of fifty lectures on the principles of pathology and the practice of physic, £5 5s. first course, afterwards gratis. The professor of chemistry delivers thirty lectures, on the [illegible] principles of that science, during Lent term [illegible] lectures, principally on organic chemistry, during Easter term. Lectures on experimental philosophy, to illustrate the laws of hydrostatics, pneumatics, and optics, with particular reference to the mathematical theories of light and sound, are delivered in Easter term. Above fifty lectures on anatomy, by Dr. Clark, are delivered in Michaelmas and Lent terms. The terms of attendance are £5 5s. for each of two courses, afterwards gratis. The pupils have the opportunity of dissecting in private. Botanical lectures are given during the Easter term, with herborising excursions occasionally. Professor Willis's lectures on natural and experimental philosophy are during the Michaelmas term; the subjects being statics, dynamics, and mechanism, with their practical illustrations; first course, £3 3s.; second, £2 2s.; afterwards gratis. The Downing professor of physic delivers a course of fifty lectures on a medical subject. A certificate of attendance is required of persons proceeding to the degree of M.B. Lectures are also delivered on crystallography and mineralogy during the Lent term. Addenbrooke's hospital, which is connected with the university, is recognised by the Colleges of Physicians and Surgeons, and by Apothecaries' Hall. It contains 100 beds, and has a department reserved for cases of midwifery. The physicians are Dr. Thackeray, Dr. Bond, and Dr. Paget. Dr. Haviland [illegible] the consulting physician. The surgeons are Mr. Lestourgeon, Mr. Hammond, and Mr. Humphry. Mr Okes is the consulting surgeon.

A student, before he can become a bachelor of physic, must have entered on his sixth year, computed from the date of his first admission at the university, have resided nine terms, and have passed the previous examination.

A bachelor of arts may become a bachelor of physic after having entered on his sixth year, computed from the date of his first admission at the university, provided that one year at least has intervened between his final determination in arts and his admission to the degree of bachelor of [illegible]

The exercises for this degree are one act and one opponency.

Candidates for the degree of bachelor of physic must, in addition to the examination by the regius professor of physic, be examined by the professors of anatomy, chemistry, and botany, and by the Downing professor of medicine. This examination [illegible]st not take place before the fifth year after admission. They must have diligently att[illegible] the lectures of the regius professor of physic for two terms, and must bring to him certificates of examination by the above professors, and of attendance on their lectures, in case the course of lectures of the professor of botany consist of not less than twenty lectures, and the courses of lectures of the professors of anatomy and chemistry, and of the Downing professor of medicine, of not less than fifty lectures each. They must also deliver to the regius professor of physic certificates of having been diligently employed in attendance on medical lectures, and the practice of some well-known hospital, for two years, or for as long a time as they have been absent from the university [illegible] their undergraduateship. Fee, £10 16s.

A licence [illegible] granted to a bachelor of physic in the term subsequent to that in which he has taken the degree, or to a master of arts of two years' standing.

Candidates for a licence *ad practicandum in medicina*, being previously bachelors of physic, [illegible] required to produce to the regius professor of [illegible] certificates of their having attended hospital practice for three years, exclusive of the nine terms which they kept by residence for the degree of bachelor of physic, and of their having attended lectures on the following subjects: practice of physic and pathology, anatomy and physiology, chemistry, botany, medical jurisprudence, materia medica and pharmacy, principles of surgery, principles of midwifery, practical anatomy for two seasons.

Candidates for a licence *ad practicandum in medicina*, being previously masters of arts, are required to bring satisfactory evidence to the regius professor of physic of their having been employed in the study of physic for five years after they became bachelors of arts; and to produce to him certificates of their having attended on hospital practice for three of the said five years, and of their having attended lectures on the subjects before mentioned.

Every candidate for a licence *ad practicandum in* [illegible] is required to pass an examination to the satisfaction of the regius professor of physic, the professor of anatomy, the Downing professor of medicine, and a doctor of physic, to be nominated by the vice-chancellor, and approved by the senate, at the first congregation after the 10th of October in each year.

There are two such examinations in every year; one in the week immediately preceding that in which the division of the Michaelmas term falls; the other in the week immediately preceding that in which the division of the Easter term falls.

A candidate for a licence *ad practicandum in medicina*, being previously bachelor of physic, cannot be examined for the said licence until the examination which shall occur next but one after his having passed the examination required for the degree of bachelor of physic. Fee, £11 6s.

M.D.—The degree of doctor of physic is granted to a bachelor of physic of five years' or to a master of arts of seven years' standing.

The exercises for this degree are two acts and one opponency.

Every candidate for the degree of doctor of physic, who has not previously obtained a licence [illegible] *practicandum in medicina*, is required to produce to the regius professor of physic the same certificates, and pass the same examination, as are required in the case of candidates for a licence *ad practicandum in medicina*. Fee, £11 12s.

The university possesses an anatomical museum, to which has been added the valuable collection of the late Dr. Macartney, the Fitzwilliam, Mesman, Mineralogy, and Geological Museums, an extensive botanic garden, and the university library. To all these the students have access.

UNIVERSITY OF EDINBURGH. (1582.)

Matriculation.—Every student in the faculties of arts, law, and medicine, before entering with any professor, must produce a matriculation ticket for the ensuing session. Tickets will be issued at the matriculation office, in the college, every lawful day, from ten till three. Enrolment in the general album is the only legal record of attendance in the university.

Library. The library will be open for the purpose of giving out books to students, either on loan or for reference, in the hall appropriated for that purpose every lawful day during the winter session, from [illegible] a.m. till four p.m., except on Saturdays, when [illegible] will be shut at one precisely.

Every student applying for books must present to the librarian his matriculation ticket for the session, with the ticket of at least one professor.

Every book taken out must be returned within a fortnight, uninjured.

Fee for each course, £4 4s. For graduation, £25.

STATUTES OF THE UNIVERSITY OF EDINBURGH RELATIVE TO THE DEGREE OF M.D.

Sect. I. No one shall be admitted to the examinations for the degree of doctor of medicine who has not been engaged in medical study for four years, during at least six months of each, either in the University of Edinburgh, or in some other university where the degree of M.D. is given; unless in addition to three Anni Medici in an university, he has attended, during at least six winter [illegible], the medical or surgical practice of a general hospital, which accommodates at least eighty patients, and during the same period a course of practical economy, in which case three years of university study shall be admitted.

Sect. II. No one shall be admitted to the examinations for the degree of doctor who has not given sufficient evidence—1. That he has studied, once at least, each of the following departments of medical science, under professors of medicine, in this or some other university, as already defined—viz.:—

During Courses of Six Months.—Anatomy, chemistry, materia medica and pharmacy, institutes of medicine, practice of medicine, surgery, midwifery, and the diseases peculiar to women and children, general pathology, practical anatomy (unless it has been attended in the year of extra-academical study allowed by Sect. I.)

During Courses of Six Months, or Two Courses of Three Months.—Clinical medicine, that is, the treatment of patients in a public hospital, under a professor of medicine, by whom lectures on the cases are given.

During Courses of at least Three Months.—1. Clinical surgery, medical jurisprudence, botany, natural history, including zoology.

2. That in each year of his academical studies in medicine he has attended at least two of the six months' courses of lectures above specified, or one of these and two of the three months' courses. 3. That, besides the course of clinical medicine already prescribed, he has attended, for at least six months of another year, the medical or surgical practice of a general hospital, either at Edinburgh or elsewhere, which accommodates not fewer than eighty patients. 4. That he has attended, for at least six months, by apprenticeship or otherwise, the art of compounding and dispensing drugs at the laboratory of a hospital, dispensary, member of a surgical college or faculty, licentiate of the London or Dublin Society of Apothecaries, or a professional chemist or druggist. 5. That he has attended, for at least six months, by apprenticeship or otherwise, the out practice of a hospital, or the practice of a dispensary, or that of a physician, surgeon, or member of the London or Dublin Society of Apothecaries.

Sect. III. No one shall obtain the degree of doctor who has not studied, in the manner already prescribed, for at least one year previously to his graduation, in the University of Edinburgh.

Sect. IV. Every candidate for the degree in medicine must deliver, before the 24th of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—1. A declaration, in his own handwriting, that he is twenty-one years of age, or will be so before the day of graduation, and that he will not be then under articles of apprenticeship to any surgeon or other master. 2. A statement of his studies, as well in literature and philosophy as in medicine, accompanied with proper certificates. 3. A medical dissertation, composed by himself, in Latin or English, to be perused by a professor, and subject to his approval.

Sect. V. Before a candidate be examined in medicine, the medical faculty shall ascertain, by examination, that he possesses a competent knowledge of the Latin language.

Sect. VI. If the faculty be satisfied on this point, they shall proceed to examine him, either *viva voce*, or in writing,—1. On anatomy, chemistry, botany, institutes of medicine, and natural history bearing chiefly on zoology; and, 2. On materia medica, pathology, practice of medicine, surgery, midwifery, and medical jurisprudence.

Sect. VII. Students who profess themselves ready to submit to an examination on the first division of these subjects, at the end of the third year of their studies, shall be admitted to it at that time.

Sect. VIII. If any one, at these private examinations, be found unqualified for the degree, he must study, for another year, two of the subjects prescribed in Section II., under professors of medicine, in this or in some other university, as above defined, before he can be admitted to another examination.

Sect. IX. Should he be approved of, he will be allowed, but not required, to print his thesis; and, if printed, forty copies of it must be delivered, before the 25th day of July, to the Dean of the Medical Faculty.

Sect. X. If the candidate have satisfied the medical faculty, the dean shall lay the proceedings before the Senatus Academicus, by whose authority the candidate shall be summoned, on the 31st of July, to defend his thesis; and finally, if the senate think fit, he shall be admitted, on the first lawful day of August, to the degree of doctor.

Sect. XI. The Senatus Academicus, on the day here appointed, shall assemble, at ten o'clock a.m., for the purpose of conferring the degree; and no candidate, unless a sufficient reason be assigned, shall absent himself, on pain of being refused his degree for that year.

Sect. XII. Candidates for graduation shall be required to produce evidence of their having conformed to those regulations which were in force at the time they commenced their medical studies in an university.

JAMES SYME,
Professor of Clinical Surgery,
Dean of the Faculty of Medicine.
W. HAMILTON,
Secretary to the Senatus Academicus.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

The members of the college are respectively entitled Ordinary Fellows, Non-resident Ordinary Fellows, and Licenciates.

Ordinary Fellows.—No one shall be elected an ordinary fellow of the college till he has obtained the degree of doctor of medicine.

Every motion for the election of a fellow shall be made, at a quarterly meeting, by one of the fellows present, seconded by another, and determined by ballot—a majority of three-fourths being necessary to carry it in the affirmative.

No physician residing in Edinburgh shall be proposed for a resident fellowship till he has been a licentiate for nine months, or, in case of his not being a licentiate, till nine months after his petition to be admitted a resident fellow shall have been presented, unless an urgent reason be assigned; in this case, he may be proposed even on the same day on which he becomes a licentiate, or at any other quarterly meeting, or at a meeting specially called for the purpose, if this proposal shall be agreed to by every member present.

No fellow shall engage himself to any candidate before the ballot; nor shall he reveal to any person in what manner he did ballot, under the pain of being considered as one who has broken his faith and honour to the college.

No fellow shall take his seat in the college till the quarterly meeting after that on which he is elected, intimation to attend being then sent to him by the clerk.

The fellows shall be placed on the roll according to the dates of their admissions, and, when two or more fellows are admitted on the same day, they shall be entered on the roll according to the dates of their diplomas, and, if their diplomas be of the same date, they shall be enrolled according to their

Every fellow before taking his seat in the college must sign a promissory engagement.

It shall be in the power of any fellow of the college to move that a candidate having a foreign degree be admitted without a previous examination, and, if the motion shall be seconded, it shall be determined by ballot at next quarterly meeting, a majority of three-fourths of the fellows present being necessary to carry it.

If an examination shall take place, it shall consist of three trials: the first by two fellows appointed by the college, on any part of medicine; the second, by two other fellows, on two aphorisms of Hippocrates; and the third, by two other fellows, on two medical cases. All these trials shall be in the presence of the college, and in the Latin language.

Non-resident Fellows.—No physician residing in Edinburgh is eligible for a non-resident fellowship.

The mode of election of a non-resident fellow is the same as that of a resident-fellow; and the laws regarding examination, in the case of a foreign degree, also apply to him.

Fees.—The fee to be paid by a resident licentiate is £100.

The fee to be paid by a non-resident licentiate is £55.

The fees are exclusive of any tax payable to Government now existing, or which may hereafter be imposed.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.
(1505.)

Regulation for Fellows.—The candidate is required—To present an essay on some surgical subject, which, if approved of, he must print for circulation among the fellows. He must then undergo three examinations—1. On anatomy and surgery; 2. On chemistry, materia medica, &c.; 3. On the essay he has written. If these are satisfactorily passed, he is admitted to the fellowship. Fee, £250; to apprentices of fellows, £100.

School of Medicine.—Every candidate for a surgical diploma must have followed the course of study, to be specified afterwards, in a university; or at the seat of an established school of medicine, as defined below; or in a provincial school, specially recognised by the college.

Under the title, established school of medicine, are comprehended all places in this kingdom where diplomas in surgery are granted, and such foreign schools as are acknowledged by the constituted authorities of the countries in which they exist.

The extent and period of study allowed to be gone through at a provincial school will be regulated by the means and facility of study which the college receive evidence of its affording; but the lectures delivered at a provincial school will be held as qualifying for only one year's course of study, unless specially recognised for more.

Qualifications of Teachers.—The following classes of persons shall be entitled to give lectures, which may be attended as part of the course of study:—1. In the universities of Great Britain and Ireland, and in University College and King's College, London, the professors of these institutions. 2. In Edinburgh, resident fellows of the Royal College of Physicians of Edinburgh, and fellows of the Royal College of Surgeons of Edinburgh. 3. In London, fellows and licentiates of the Royal College of Physicians of London, and members of the Royal College of Surgeons of London, whose status as teachers has been admitted by that college. 4. In Dublin, fellows of King's and Queen's College of Physicians in Ireland, and members of the Royal College of Surgeons in Ireland. 5. In Glasgow, members of the Faculty of Physicians and Surgeons of that city. 6. In recognised provincial schools, teachers whose status as such has been admitted by the college, on special application. 7. In any of the above schools, teachers, who, having acquired a status as such in one of the four established schools, in conformity with the above regulations, shall have been subsequently admitted, on application to the college, to the enjoyment of the same privileges in another school. (a)

The following branches of instruction may be conjoined:—Anatomy and practical anatomy, chemistry and practical chemistry, practice of medicine and clinical medicine, practice of surgery and clinical surgery, mathematics and mechanical philosophy; and, for the present, clinical medicine or clinical surgery may be taught in conjunction with any one of the other courses of education prescribed in the curriculum, by a physician or surgeon qualified according to the regulations of the college, and attached to a public hospital of the size which these regulations prescribe.

Course of Study. Preliminary Instruction.—Every candidate for the diploma of the Royal College must, either previously to or during his medical education, have received regular instruction in the elements of mathematics; and must have subsequently attended a course of mechanical philosophy of at least three months' duration, and of not fewer than sixty lectures.

Professional Instruction. The candidate must have been engaged in attending the following separate and distinct courses of lectures during a period of not less than twenty-seven months, in which must have been included three winter sessions of six months' duration each. Anatomy, twelve months. Chemistry, one course of six months. Practical chemistry (the number of pupils in each class being limited to twenty-five), one course of three months. Materia medica and pharmacy, one course of six months. Practical pharmacy, one course of six months. Institutions of medicine, or physiology,

(a) The only lectures expected from this law are those on mechanical philosophy and on chemistry. The former may be professors in universities, lecturers in public institutions, or teachers specially recognised by the college; and the latter may be persons not medical, if recognised by the college on special application, in conformity with a resolution of the college on the 25th October, 1838. In all cases of special recognitions, proof of capability, and of the applicant possessing the requisite apparatus for illustrating his lectures, will be required.

one course of six months. Practice of medicine, one course of six months. Clinical medicine, one course of six months, or two courses of three months each, during the period of his attendance at the hospital where they are delivered. Principles and practice of surgery, two courses of six months each, or, principles and practice of surgery, and military surgery, one course of six months each. Clinical surgery, one course of six months, or two courses of three months each, during the period of his attendance at the hospital where they are delivered. Midwifery and diseases of women and children, one course of three months. Medical jurisprudence, one course of three months.

The six months' courses delivered in Edinburgh must consist of not fewer that 110 lectures, with the exception of clinical medicine, clinical surgery, and military surgery. The three months' courses must consist of not fewer than sixty lectures. Two London courses of three months each on any of the above subjects will be taken as equivalent to one six months' course.

The candidate must also have attended for twenty-one months a public general hospital containing at least eighty beds.

Fees payable by Candidates.—For a diploma, ordinary candidates pay the sum of £7 5s. (Apprentices of fellows of the Royal College, bound for the freedom, pay 25s.; their other apprentices pay £2 16s. 6d. Assistant-surgeons in the navy, having previously obtained certificates from the college, pay £2 11s. 6d. Surgeons in the navy, having obtained certificates from the college, pay 15s. 6d.)

For the certificate of qualification to act as assistant-surgeon in the navy, candidates not having paid for any previous qualification pay £4 19s. 6d.

For the certificate of qualification to act as full surgeon in the navy, assistant-surgeons who have already obtained certificates from the college pay £3 18s. 6d., and those who have previously obtained the diploma of the college pay £2 17s. 6d.

UNIVERSITY OF GLASGOW.—REGULATIONS REGARDING DEGREES IN MEDICINE AND SURGERY TO CANDIDATES ENTERING THE UNIVERSITY IN, OR SUBSEQUENT TO, 1839-40.

Medicine.—Every candidate for a medical degree must lodge with the clerk or senate—

1. A certificate of moral character, by two respectable persons, with evidence of having attained the age of twenty-one.

2. Evidence of having attended, for four years, a university in which medicine is regularly taught, or medical lectures delivered in London or Dublin; and at least one year of the four must be spent at the University of Glasgow. In each year he must have attended at least two courses of lectures of six months' duration; but if he shall spend one year only at the University of Glasgow, then he must attend three courses of lectures delivered there, two of them, at least, being of six months' duration.

3. Certificates of having attended one or more courses of lectures on the following subjects, each course, except forensic medicine and botany, being of six months' duration; if of less extent, then two courses shall be deemed equivalent to one of six months:—Anatomy and physiology; chemistry; the theory or institutes of medicine; practice of medicine; materia medica and pharmacy; midwifery; surgery; forensic medicine; botany (a); anatomical dissections; and two years' practice of a general hospital, containing eighty beds, and in which the student must spend at least one-half of the period of attendance in the physicians' wards. Neither hospital attendance nor anatomical dissections shall be considered as equivalent to a course of lectures.

4. Each candidate must lodge with the clerk of senate, with the above certificates, a schedule of his course of study, properly filled up, together with an English essay on some medical subject chosen by himself, two months before the time of graduation—that is, on or before the 1st of March, or the 10th of June, yearly, otherwise he cannot be admitted for examination till the following term. All tickets of attendance lodged by candidates must be certified, not excepting those of the current session; but the certified botanical tickets of the current session shall not be received until the 1st of April.

(a) No course of botany attended previously to 1839-40 is received, unless it shall have been delivered in a university.

No student entered in any medical class later than the 1st of December, without special permission of the senate. And it is strictly required of every candidate for graduation that he produce evidence of his name having been enrolled in the library-book, on or before that day, as well as an express certificate of his regular attendance by each professor on whose lectures he attends. In order, further, to ensure attendance, all students must inscribe their names, once a fortnight, in a register kept for the purpose, stating the lectures, &c., which they attend.

6. Every candidate shall prove that he has a competent knowledge of Latin, and shall undergo full examinations on all the subjects included in the curriculum.

Surgery.—The regulations respecting certificates of age and moral character are the same as those under the head of degrees in medicine.

Candidates for the degree of master of surgery shall produce evidence that they have attended medical lectures in one or other of the universities or schools already specified for four years, during which they must have attended one or more courses on the following subjects, the extent of each course, with the exception of forensic medicine, being six months, or the equivalent two courses of a shorter duration. The candidate must have attended not less than three courses of medical lectures in the University of Glasgow. In each year of his study he shall have attended at least two or more courses of lectures, of six months' duration, on anatomy, surgery, chemistry, theory or institutes of medicine, practice of medicine, midwifery, materia medica and pharmacy, forensic medicine, anatomical dissections, and two years' practice of a general hospital, in which the student must attend one-half of the prescribed period in the surgical wards, and the other half in the medical.

The regulations as to lodging certificates of attendance, and an essay in English, and as to the candidate's knowledge of Latin, are the same as under the head of medical degrees, only the essay is to be on a surgical subject. The days of graduation are the last Wednesday of April and the first Wednesday of August.

Fee to the library, &c., for the degree of M.D.	£15	0	0
Duty on stamp for ditto	10	3	0
	£25	3	0
Fee for the degree of Chirurgiæ Magister	£10	10	0

N.B. Candidates for degrees who attended classes in the University of Glasgow previously to 1839-40 admitted to examination, according to the regulations which existed at the time when they began to study medicine.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

Regulations for the Surgical Diploma.—The faculty recommend that candidates should attend elementary courses of study in mathematics and natural philosophy. These branches, however, are not imperative. Every candidate's knowledge in Latin should be tested at his examination, by being required to construe some part of Gregory's Conspectus Medicinæ Theoreticæ.

Curriculum.—Anatomy, two courses of six months. Practical anatomy, one course of six months; enacted 7th June, 1830. Surgery, two courses of six months. Chemistry, one course of six months. Practical chemistry, one course of three months; enacted 8th November, 1831. Theory of medicine, one course of six months. Practice of medicine, one course of six months. Materia medica, one course of six months. Midwifery, one course of six months. Clinical medicine, one course of six months; enacted 7th June, 1830. Clinical surgery, one course of six months; enacted 7th June, 1830. Medical jurisprudence and police, one course of six months; enacted 4th April, 1841. Botany, one course of three months; enacted 3rd February, 1834. A public hospital, eighteen months; enacted 3rd February, 1834. A surgeon's or apothecary's shop, six months; enacted 3rd February, 1834.

The above lectures must have been delivered by professors or lecturers in an university; or by resident members of the Royal Colleges of Physicians or Surgeons respectively of London, Edinburgh, or Dublin; or by means of the faculty. Every candidate must have been employed in the above course of studies for four winter sessions, or for three winter sessions and two summer sessions, so that the whole period of attendance shall not be less than three years complete. An essay, the subject to be fixed by the examiners, to be written by the candidate, in his own handwriting; and no essay to be submitted for a shorter period than 24 hours. Specimens of bones, or other anatomical or surgical preparations, or specimens from the materia medica, shall be used at the discretion of the examiners. The fee of seven guineas shall be deposited with the president previous to the examination, and at the same time satisfactory documents shall be produced that the above curriculum of education has been duly completed by certified attendance.

N.B. These branches, whose dates are specified, are not required by those students who commenced their studies anterior to these enactments. The commencement of education is ascertained by the date of the first ticket.

The fees for the diploma are £7 7s. The president, visitor, collector, box-masters, and seal-keeper, form, along with the assistant-examiners, the examining court. The diploma of the faculty is recognised by all the licensing bodies in the three kingdoms, and by the poor-law commissioners in England and Ireland.

KING'S COLLEGE, ABERDEEN.—REGULATIONS TO BE OBSERVED IN GRANTING DEGREES IN MEDICINE AT KING'S COLLEGE.

All candidates for the degree of M.D. must be of the age of twenty-one years, and must produce satisfactory certificates of moral character, and exhibit the diploma of A.M. from some university.

All candidates, with the exceptions mentioned below, must have been engaged in the study of medicine for at least four years, one of which must be passed in Aberdeen, and must produce evidence of having attended, in some recognised school of medicine, the following courses of lectures:—Six months' courses: anatomy, two courses; chemistry, one course; materia medica, one course; surgery, one course; institutes of medicine and physiology, one course; practice of medicine, one course; midwifery, one course. Three months' courses: dissections, two courses; practical chemistry, one course; medical jurisprudence, one course; clinical surgery, one course; botany, one course; clinical medicine, two courses.

In addition to the above, the candidate must have attended for two years the wards of a hospital containing 100 beds; and, during three months, a shop or dispensary for the compounding of medicine.

The preceding regulations are strictly enforced in the case of all students who shall commence their medical studies at a period subsequent to 1st October, 1840. But gentlemen who possess a licence or diploma from any of the royal colleges of physicians or surgeons, and who have been engaged for at least five years in the practice of medicine, may be admitted to examination on producing their licence or diploma, along with satisfactory evidence of sufficient preliminary education and of good moral character.

Previously to examination each candidate must lodge with the secretary £26 5s. 6d., the same to be returned to him should he not obtain his degree.

Degrees in medicine are conferred at two stated periods annually—viz., at the end of April, and at the end of July.

REGULATIONS FOR GRANTING MEDICAL DEGREES IN MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.

Curriculum.—Four years of attendance on medical classes, of which one year may be passed at any recognised medical school; but three, at least, must be passed in a university, including one, at least in this university. The attendance, in each year,

to embrace not fewer than two medical classes of six months each; or one of six months, with two or three months each. But it will be held equivalent to *one* of four years of such attendance in a university—1st, in a master of arts, to have attended one medical class while passing through the curriculum of arts; or, 2ndly, in any student, to have attended a medical class, in each of two years, along with classes in the curriculum of arts. The university attendance to include the following eight classes, each for a course of six months:—Anatomy, practical anatomy, chemistry, materia medica, institutes of medicine, surgery, practice of medicine, midwifery, and the following three classes, each for a course of three months—botany, practical chemistry, medical jurisprudence.

Eighteen months of attendance on the medical and surgical practice of a hospital containing not fewer than eighty beds, along with attendance for six months on lectures on clinical medicine, and for three months on lectures on clinical surgery.

Six months of compounding and dispensing medicines in the laboratory of a hospital, or of a public dispensary, or of a licensed general practitioner, or of a regular dispensing druggist.

Exemption to Practitioners.—It will be held equivalent to the curriculum prescribed in the three foregoing regulations to have obtained, upon examination, a diploma or a licence, in medicine or in surgery, from a university or other authority established by law within the United Kingdom, and to have subsequently attended medical classes in this university during one winter session.

Examinations.—The examination terms to be two in each year—the *first* to commence on the 20th of April, if a Wednesday, but if not, on the first Wednesday thereafter; the *second* on the 13th of October, if a Wednesday, but if not, on the first Wednesday thereafter.

Every candidate to undergo at least three separate professional examinations—the first, pharmaceutical; the second, surgical; the third, medical; to be conducted partly in writing, as well as *vivâ voce*, and partly by demonstration. The *first* to include chemistry, botany, materia medica, pharmacy, and the doctrines of physics relating to specific gravities, to gases and vapours, and to climate. The *second* to include anatomy, institutes of medicine, surgery, and the doctrines of chemistry and physics illustrative of animal structure and function. The *third* to include the practice of medicine, midwifery, and medical jurisprudence.

Every candidate not a master of arts must undergo a preliminary examination on the Latin language (the book to be used being *Celsus de Medicina*), and on the etymology of such terms in the medical sciences as are derived from the Latin and the Greek.

Any candidate that so desires shall be admitted to each one, or to any two, of his three professional examinations, at different terms; but not to the first examination until the begining of his third year of medical classes; nor to the second until the end of his third year; nor to the third until the end of his fourth year, and until he be twenty-one years of age; nor shall a greater interval than eighteen months be allowed between two successive professional examinations without a full renewal of the previous one or two. The preliminary examination must be passed at the same term as the first professional examination.

In order to be received for examination, certificates must have been lodged with the professor of medicine on the first day of the month of the examination term, showing that the candidate is of the required age, that he is of good moral character, and that he has passed through the requisite course of professional education. Along with such certificates must be lodged a schedule, filled up in his own handwriting, containing a list of them, and specifying such additional branches of education, professional and general, as he may have studied.

UNIVERSITY OF ST. ANDREW'S. (1412.)—REGULATIONS FOR GRANTING MEDICAL DEGREES.

The candidate must produce evidence of unexceptionable moral character, and before being admitted to examination must subscribe a declaration that he is twenty-one years of age.

The candidate must have had a liberal and classical education, and, if he be not in the possession of the degree of A.M., must be ready to undergo an examination as to his proficiency in the Latin language.

The candidate must produce certificates that he has regularly attended lectures delivered by professors in some university, or by resident fellows of the Royal Colleges of Physicians or Surgeons of London, Edinburgh, Glasgow, Aberdeen, or Dublin, for at least four complete winter sessions, or three winter and three summer sessions, on the following branches:—1, anatomy, two courses of six months each; 2, practical anatomy, twelve months; 3, theory of medicine, or physiology, one course of six months; 4, chemistry, one course of six months; 5, practical chemistry, one course of three months; 6, materia medica and pharmacy, one course of six months; 7, surgery, one course of six months; 8, clinical medicine, one course of six months; 9, practice of medicine, one course of six months; 10, clinical surgery, one course of six months; 11, midwifery, and diseases of women and children, one course of three months; 12, an apprenticeship, or six months' attendance in the shop of an apothecary, or in the laboratory of a public hospital or dispensary; 13, attendance at a public hospital, containing not less than eighty beds, for at least eighteen months.

These regulations will be invariably observed, except when the candidates are possessed of a surgeon's diploma or licence from the Colleges of London, Edinburgh, or Dublin, or the Faculty of Physicians and Surgeons of Glasgow, or a licence from the Apothecaries' Company, in which case they have merely to present such diploma or licence previous to their examination for M.D.

UNIVERSITY OF DUBLIN (TRINITY COLLEGE). 1591

Chancellor, his Majesty the King of Hanover; *Vice-Chancellor*, his Grace the Lord Primate of Ireland; *Provost*, Dr. Sadleir.

The days of graduation are, Shrove Tuesday, and the first Tuesday in July. The degree of bachelor of medicine may be obtained in two modes:—

1. Graduates in arts can obtain the degree at any of the half-yearly periods of graduation, provided the requisite medical education and examination shall have been accomplished. Fee for entrance, £16; fees for study in arts during four years, £7 10s. each half year; fees for graduation in arts, £8 17s. 6d.

2. Candidates are admissible to the degree of M.B., without previous graduation in arts, at the end of five years from the July following the Hilary examination of the first undergraduate year, provided the usual education and examinations in arts of the first two years of the undergraduate course shall have been completed, as also the medical education and examinations, as in the case of other candidates. Fees for two years' study in arts (besides the usual entrance payment of £16) are £7 10s. each half year. The graduation fees for the degree of bachelor of medicine are £11 15s. The standing of the first undergraduate year may be obtained by attending the October examination of that year, if the student has entered not later than the first Monday of the July of the same year, and has completed the payments due since the ordinary period of entrance in the preceding November. The medical education of a bachelor of medicine comprises attendance on the following courses of lectures in the school of physic established by act of parliament, provided that one, and not more than three, of the courses which begin in November be attended during each of four sessions. Three of these courses, at the discretion of the candidate, may be attended at the University of Edinburgh. The courses are on—anatomy and surgery, chemistry, botany, materia medica and pharmacy, institutes of medicine, practice of medicine, midwifery (by the professor to the College of Physicians), clinical lectures at Sir Patrick Dun's Hospital, during at least one session (six months), as delivered by the professors in the school of physic; the attendance on such clinical lectures by the professors to be extended to three additional months of a summer session commencing in May. This regulation to affect all students commencing their medical studies after 17th July, 1841, and to be in lieu of attendance on the hospital from 1st May to the 1st November following. The fees for attendance on the clinical lectures are £3 3s. to the professors for each three months' attendance, and (provided the student be of two years' standing in the university) £3 3s. to the treasurer of the hospital for the first year, with a proportionate sum for any longer period. The fee for each of the other courses is £4 4s. The examinations are conducted by the regius professors of physic of the university, the six professors of the school of physic, and the professor of midwifery to the King and Queen's College of Physicians. No further examination is requisite for the degree of doctor of medicine, which may be taken at the expiration of three years from having taken the degree of M.B., provided the candidate shall have graduated in arts. The fees for the degree of doctor of medicine are £22. The degrees are publicly conferred by the vice-chancellor, in the senate or congregation of the university.

COLLEGE TERMS.

Hilary begins January 10, ends March 25.
Trinity " April 15, " June 30.
Michaelmas October 10, " December 20.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Qualifications of Candidates for License.—Candidates must produce evidence of having been engaged in the study of medicine for four years, and of having attended two at least of the required courses in each year. Candidates, except those who have taken a medical degree prior to 1840, must produce certificates of attendance on one or more courses of lectures on the following subjects, each course being of six months' duration, with the exception of botany and forensic medicine, which must include at least fifty lectures:—Anatomy and physiology, chemistry, materia medica and pharmacy, botany, institutes of medicine, practice of medicine, principles and practice of surgery, midwifery, and forensic medicine. The lectures on anatomy, chemistry, botany, materia medica, institutes of medicine, and practice of medicine are required to have been delivered by the respective professors of the school of physic in Dublin, or in an university. The lectures on surgery are required to have been delivered on at least three days in the week, during four months, by a professor of surgery in an university or college of physicians or surgeons in the United Kingdom, or by the surgeon of a medico-chirurgical hospital recognised by the college. These lectures must not form a part of a course of lectures on anatomy. The lectures on midwifery are required to have been delivered by a professor of midwifery in the university or college of physicians or surgeons in the United Kingdom, or by the master of the lying-in hospital, Dublin. The lectures on medical jurisprudence are required to have been delivered by a professor in an university or college of physicians or surgeons in the United Kingdom. Certificates must also be produced of six months' attendance on anatomical demonstrations and dissections, and of at least two years' hospital practice; one year in the hospital of the school of physic in Dublin or Edinburgh, the other in any recognised medico-chirurgical hospital. The certificates must include attendance on the entire practice of the hospital, and on all the clinical lectures delivered in the hospital during such attendance. Candidates who have taken a medical degree in an university shall be admitted to examination upon such degree alone. Every candidate for licence, except those who have taken a medical degree prior to 1840, is examined on two separate days; on the first day on anatomy and physiology, chemistry, botany, materia medica, and pharmacy; and on the second day on acute and chronic diseases, midwifery, and non-naturals, and on the translating of one or more of the following books from the original Greek, viz.: Hippocrates, Aretæus, and Galen. Graduates in medicine are only required to undergo the second day's examination. The examinations, which are public, are conducted in the English language; but every candidate, except graduates in arts at Oxford, Cambridge, or Dublin, is required to translate medical cases from the English into the Latin language,

before he is admitted to examination as to his professional acquirements. Fee for license, £30.

The license of this college is equivalent to a medical degree, and it confers privileges which a degree does not.

The fellows are chosen from the licentiates of three years' standing; they are required by statute (40 Geo. III., cap. 84, sect. 42) to have taken the degree of M.D. in one of the universities of Dublin, Oxford, or Cambridge; or to have taken the degree of A.B. in one of these universities, and to have received the medical education requisite for obtaining the license, for which a degree in medicine is not necessary. Fee to the college, on election to the fellowship, £20, with an additional stamp duty of £25.

The act of parliament provides that these qualifications may be dispensed with whenever, at any time, the number of fellows is reduced to six.

The college has the power of conferring the honorary fellowship on any of its own licentiates who have not the statutable qualifications; on such of its fellows as resign or vacate the fellowship; and on such eminent medical men, not licentiates, as it may wish to distinguish by its approbation.

ROYAL COLLEGE OF SURGEONS IN IRELAND.
(1784- -1828.)

By-laws respecting the Registry of Pupils.—Every person requiring to be registered as a pupil on the college books shall be so registered, if he shall have laid before the court of censors the following documents, viz.:—

Provided he be an apprentice, and shall have paid any apprentice fee: 1. A receipt showing he has lodged, to the credit of the president, and for the use of the college, in the Bank of Ireland, the registry fee of te [illegible] 2. A receipt showing that the member or licentiate to whom he is indentured has lodged a similar sum of ten guineas. 3. A declaration, subscribed by the member or licentiate to whom he is indentured, stating that he has really and *bona fide* received the usual fee of one hundred and fifty guineas, or value to that amount. 4. His indenture of apprenticeship, duly executed, and bearing the requisite stamp.

Provided he be an apprentice, and shall not have paid an apprentice fee, he shall lay before the court: 1. A declaration, subscribed by the member or licentiate to whom he is indentured, that he has not received, or that he does not expect to receive, any apprentice fee. 2. A receipt, showing that he has lodged, to the credit of the president, and for the use of the college, in the Bank of Ireland, the sum of fifty guineas. 3. His indenture of apprenticeship, regularly executed and registered.

Provided he be an apprentice, and be the son, brothers or nephew of the member or licentiate to whom he is indentured, or the son of some other member or licentiate of the college, and shall not have paid an apprentice fee, he shall lay before the court: 1. A declaration, subscribed by the member or licentiate to whom he is indentured, that he has not received, or that he does not expect to receive, any apprentice fee. 2. A receipt, showing that he has lodged, to the credit of the president, and for the use of the college, in the Bank of Ireland, the sum of ten guineas.

Provided he shall not be an apprentice to a member or licentiate of the college. 1. A receipt, showing that he has lodged, to the credit of the president, and for the use of the college, in the Bank of Ireland, the registry fee of ten guineas.

By-laws relating to Education and the Qualification of Candidates for Letters Testimonial.—Every registered pupil or apprentice shall be admitted to an examination for letters testimonial, if he shall have proved and showed that his professional education has been, in all respects, comformable and agreeable to the provisions and enactments of the by-laws and rules of the college, and shall have laid before the court the following documents:—1. A receipt, showing that he has lodged, as a registry-fee, the sum of ten guineas in the Bank of Ireland, to the credit of the president, and for the use of the college, previously to his being admitted to any examination. 2. A receipt, showing that he has lodged a sum of twenty guineas in the Bank of Ireland to the credit of the president, and for the use of the college, previous to his final examination for letters testimonial. 3. A certificate, signed by the president or vice-president, and two of the court of censors, that he has passed an examination as to his acquaintance with the Greek and Latin languages. 4. Certificates, showing that he has been engaged in the study of his profession for not less than four years, three of which shall have been passed in attendance on lectures or hospitals, during the winter sessions, in Dublin, London, Edinburgh, or Glasgow. 5. Certificates of attendance on a surgical hospital where clinical instruction is constantly given, containing fifty patients at least, for a period of not less than twenty-four months. 6. Certificates of attendance on the medical practice of a recognised hospital or dispensary, where clinical instruction is constantly given during twelve months. 7. Certificates of attendance on three courses of lectures on anatomy and physiology, three courses of lectures on the theory and practice of surgery, and of the performance of three courses of dissections, accompanied by demonstrations; also certificates of attendance on two courses of lectures on chemistry, or one course of lectures on general, and one on practical, chemistry; one course of lectures on materia medica; one course of lectures on the practice of medicine; one course of lectures on midwifery, and one course of lectures on medical jurisprudence. 8. A thesis, essay, or dissertation, in Latin or English, on any of the following subjects:—Anatomy, physiology, surgery, the practice of medicine, chemistry, materia medica, midwifery, or medical jurisprudence; or, in the place of such dissertation, a series of cases collected in the hospital in which the candidate has attended, illustrated by comments or observations.

A candidate, being a registered pupil, shall be allowed to pass the first of the two days' examination above mentioned, on anatomy and physiology, on laying before the court of censors the following documents:—1. A receipt, showing that he has lodged a sum of ten guineas in the Bank of Ireland, to the credit of the president, and for the use of the college. 2. Certificates, showing that he has been engaged in the study of his profession for not less than three winter sessions in Dublin, London, Edinburgh, or Glasgow. 3. Certificates of attendance on three courses of lectures on anatomy and physiology, and of the performance of three courses of dissections, accompanied by demonstrations, such candidate not being admissible to the second day's, or the final, examination, on the other subjects above specified, until he shall have lodged a further sum of ten guineas in the Bank of Ireland, to the credit of the president, and for the use of the college, and shall have laid before the court of censors all the documents enumerated in the by-laws relative to "qualifications for the letters testimonial." Notice of every examination for letters testimonial is posted in the hall, and the secretary also, by regular summonses, gives notice of such examination to the members resident in Dublin. The examination takes place in the presence of such members and licentiates as choose to attend. The candidate is examined on two several days in anatomy and physiology, on the practice of medicine and surgery, and on any other branch of medical science, and shall perform such surgical operations or dissections, and explain such anatomical preparations, as the court may require.

Fee for letters testimonial or diploma, £31 10s.; and for admission as member (which takes place by ballot after three years' standing as a licentiate, and confers corporate rights), £31 10s.

APOTHECARIES' HALL OF IRELAND. 1791.

Laws regarding the Education of Apothecaries.—Every candidate must undergo two separate examinations—one for the certificate of apprentice, the other for the licence to practise.

Every candidate for the certificate of apprentice must have attained the age of fifteen years, and will be examined in the following books:—The works of Sallust; the first six books of the Æneid of Virgil; the Satires and Epistles of Horace; the Greek Testament; the dialogues of Lucian; the first four books of Homer's Iliad; the first six books of Telemachus, or the history of Charles the Twelfth (in French); the first two books of Euclid; and algebra—to simple equations.

Every candidate for the licence to practise as an apothecary must lay before the court the following documents:—1. The certificate of apprentice. 2. The indenture of apprenticeship, enrolled according to the act of parliament and bearing the certificate of the licentiate apothecary to whom he has been indented, that he is of good moral character, and has fulfilled the period of his apprenticeship. 3. Certificates duly signed that he has diligently attended at least one course of lectures on each of the following subjects, delivered at the school of Apothecaries' Hall, or at some other school of medicine recognised by the court (the order of the study here laid down is recommended for the guidance of students):—Chemistry, anatomy and physiology, six months; practical chemistry and botany, three months; materia medica, demonstrations, and dissections, theory and practice of physic, surgery, midwifery, and the diseases of women and children, six months; medical jurisprudence, three months.

A certificate of twelve months' attendance on the entire practice of a medico-chirurgical hospital, recognised by the court, containing not less than fifty beds, and where clinical instruction is regularly given.

Also, a certificate of having assisted in at least thirty cases of midwifery practice, twenty of which must be attended in a recognised hospital.

The examination for the licence to practise as an apothecary will be as follows:—In translating and explaining the process of the British pharmacopœias and extemporaneous prescriptions; in chemistry and general physics; in materia medica and therapeutics; in natural history and medical botany; in anatomy and physiology; in the theory and practice of medicine; in midwifery; in medical jurisprudence.

The examination for the licence to act as assistant to an apothecary in compounding and dispensing medicine will be confined to the following subjects:—To translate the Dublin pharmacopœia, and extemporaneous prescriptions; pharmacy, botany, materia medica, and mechanical philosophy.

The candidate for the assistant's licence may present himself for examination at the termination of five years' apprenticeship.

The court of examiners sit every Friday, at two o'clock, and proceeds with the examination of candidates, in the order in which their names appear on the list.

A rejected candidate cannot be re-admitted to examination until the expiration of six months, and, after a second rejection, can appeal to be examined by the King and Queen's College of Physicians.

All lecturers are required to furnish the court of examiners with a list of such gentlemen as have taken out admission tickets on or before the first day of January; also a similar list of those who have obtained certificates of having attended their respective courses, with the number of lectures in each course, on or before the 10th May, annually.

REGULATIONS OF THE ARMY MEDICAL DEPARTMENT, 13, ST. JAMES'S-PLACE.

Director-General, Sir James M'Grigor, Bart., M.D. (1815). Deputy Inspectors-General of Hospitals, Dr. Gordon (1836), and Dr. Clarke, assistant staff-surgeon. Apothecary, Francis Bassano (1825). Commissioned for Ireland only: Director-General, Dr. Renny (1795). Deputy Inspectors-General, Dr. Peile, Dublin (1803); Sir James Pitcairn, M.D., Cork, 1803.

A candidate for an assistant-surgeoncy in the army is required to fill up a blank form of certificate, which may be obtained at the office by written application to the director-general, specifying by whom he is recommended, his Christian and surname at full length, with the course of study he has pursued. The candidate is, in addition, to sign and forward the following declaration:—

"I [Christian and surname at full length],...... years of age, a candidate for employment in the medical department of the army, do hereby attest my readiness to engage for general service, whether at home or abroad, and to proceed on duty immediately on being gazetted. I declare my age not to exceed twenty six years, that I am unmarried, and that I labour under no mental or constitutional

disease, nor physical disability, that can interfere with the most efficient discharge of the duties of a medical officer in any climate." [Signature] . . .

In selecting from among the candidates for the medical department of the army, a preference is given to those who can fill up all the blanks in the printed form; but the name of no gentleman can be placed on the list who does not possess the diploma of either of the colleges of surgeons of London, Edinburgh, or Dublin, and who cannot produce the following testimonials:—Eighteen months' attendance at an hospital of celebrity, where the average number of in-patients is not less than one hundred; twenty-four months' anatomy; twelve months' practical anatomy; twelve months' surgery, or (what is preferred) six months' surgery, and six months military surgery; eight months' clinical surgery, a complete course of two or three lectures during the week; twelve months' practice of physic, or six months of practice of physic, and six months of general pathology; eight months' clinical lectures on ditto, the same as required in surgery; twelve months' chemistry; six months' practical chemistry; three months' botany; four months' materia medica; three months' practical pharmacy, or apprenticeship; five months' natural history; five months' midwifery; five months' natural philosophy.

The candidates must be unmarried, not beyond twenty-six years of age, nor under twenty-one years.

Candidates who have had an university education, and have the degree of A.B. or A.M., as well as that of M.D., will be preferred; but a liberal education, and a competent knowledge of the Greek and Latin languages, are indispensably requisite in every candidate; and the greater the attainments of the candidates in various branches of science, in addition to competent professional knowledge, the more eligible will they subsequently be deemed for promotion in the service; for selections to fill up vacancies will be guided more by reference to such acquirements than to mere seniority. Before promotion from the rank of assistant-surgeon to any higher rank, every gentleman must be prepared for such other examination as may be ordered before a board of medical officers.

Although the British schools are specified, it is to be understood that candidates who have received regular education in approved foreign universities or schools will be admitted to examination.

With the exception of practice of physic and clinical medicine by one teacher, candidates must have attended separate lectures for each branch of the science. The certificate of the teacher of practical anatomy must state the number of subjects or parts dissected by the pupil. Certificates of lectures and attendance must be from physicians or surgeons of the recognised colleges of physicians and surgeons of the United Kingdom, or of foreign universities. A certificate that the candidate is acquainted with the art of cupping is required.

Diplomas, tickets of attendance on lectures, and certificates of regular attendance by each professor or lecturer, must be lodged at this office for examination and registry at least one week before the candidate appears for examination, and likewise certificates of moral conduct and character, one of them by a clergyman, and that of the parochial minister is desirable. Baptismal certificates are required at the same time; if the parish register cannot be resorted to, an affidavit from one of the parents, or some person who can attest the fact, will be accepted.

All communications to be forwarded "unsealed," under cover, to "the Right Honourable the Secretary at War," with the words "Army Medical Department" at the corner.

Although, in the examination of candidates, gentlemen are expected to be qualified in every branch of study required, they are requested to be particularly coversant in the knowledge of—1. Tropical diseases, and the diseases to which soldiers are most liable. 2. Military surgery, and works on the habits of soldiers and rules of the service. 3. Cullen's Nosology, being that adopted in all returns and reports. 4. Willan's Classification of Cutaneous Diseases. 5. The latest authors on the diseases of the eye. They are expected readily to translate a passage from a Greek or Latin author; to be conversant with Baillie and the later author morbid anatomy; with Cullen's, Mason Good's, and Gregory's Practice of Physic, the latter giving an account of tropical diseases, and those most commonly met with in the army; with the works of Hunter, Hennen, Dr. John Thomson, Guthrie, Samuel Cooper, Millengen, Ballingall, Marshall, and Baron Larrey, on Military Surgery; with the works of Chisholm, Bancroft, Lind, Blane, Burnet, Johnstone, and Annesley, on the Diseases of Warm Climates; but Baillie's Morbid Anatomy, Hennen's and Ballingall's Military Surgery, 3rd edition, with his valuable work on Medical Topography, Guthrie on gun-shot wounds and on the eye, and Gregory's Practice of Physic, should form part of the baggage of every military surgeon.

Candidates, after passing their examination, will not have any leave of absence granted, but will be stationed at Chatham for two or three months, previously to being gazetted; and on their conduct there will depend their obtaining their commissions. The appointment of army-assistant surgeons rests with the director-general, Sir James M'Grigor, Bart., by whom the examinations are generally conducted.

NAVAL MEDICAL DEPARTMENT.—ADMIRALTY OFFICE, SOMERSET HOUSE.

Director-General of the Medical Department of the Navy, Sir William Burnett, M.D., Knt., K.C.H., F.R.S.

Qualifications.—The Right Hon. the Lords Commissioners of the Admiralty having been pleased to direct "that no person be admitted as an assistant-surgeon in the Royal Navy who shall not produce a certificate from one of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, of his fitness for that office; nor as a surgeon unless he shall produce a diploma or certificate from one of the said royal colleges, founded on an examination to be passed subsequently to his appointment of assistant-surgeon, as to the candidate's fitness for the situation of surgeon in the navy; and, in every case, the candidate producing such certificate or diploma shall also undergo a further examination before the director-general of the medical department of the navy, touching his qualifications in all the necessary branches and points of medicine and surgery for each of the steps in the naval medical service," the inspector-general doth hereby signify, for the information of those persons to whom it may relate, that these regulations and directions will be strictly adhered to; and further, that, previously to the admission of assistant-surgeons into the navy, it will be required that they produce proof of having received a preliminary classical education, and that they possess, in particular, a competent knowledge of Latin; also, that they are of good moral character, the certificate of which must be signed by the clergyman of the parish, or by a magistrate of the district. That they have served an apprenticeship, or have been engaged for not less than six months in practical pharmacy. That their age be not less than twenty years, nor more than twenty-four, and that they are unmarried. That they have actually attended a hospital London, Edinburgh, Dublin, Glasgow, or Aberdeen, for two years, after the age of eighteen, in which the average number of patients is not less than 150. That they have been engaged in actual dissections of the human body twelve months; the certificates of which, from the teacher, must state the number of subjects or parts dissected by the candidate. That they have attended lectures, &c., on the following subjects, at established schools of eminence, by physicians or surgeons of the recognised colleges of physicians or surgeons in the United Kingdom, for periods not less than hereunder stated, observing, however, that such lectures will not be admitted if the teacher shall lecture on more than one branch of science, or if the lectures on anatomy, surgery, and medicine, be not attended during three distinct winter sessions of six months each.

Anatomy (or general anatomy, twelve months; and comparative anatomy, six months), eighteen months.
months
months. Theory of medicine, six months. Practice of medicine, twelve months. If the lectures on the theory and practice of medicine are given in conjunction, then the period required is eighteen months (six months' lecture on pathology, if given at a university where there may be a professorship on that branch of science, will be admitted in lieu of six months' lectures on the practice of medicine). Clinical lectures, at a hospital as above (or the practice of medicine, six months; and the practice of surgery, six months), twelve months. Chemistry (or lectures on chemistry, three months, and practical chemistry, three months), six months. Materia medica, six months. Midwifery (accompanied by certificates stating the number of midwifery cases personally attended), six months. Botany (or general botany, three months; and medical botany, three months), six months.

In addition to the tickets for the lectures, certificates must be produced from the professors, &c., by whom the lectures were given, stating the periods (in months) *actually* attended by the candidates. The time, also, of actual attendance at a hospital or infirmary must be certified, and the tickets as well as certificates of attendance, age, moral character, &c., must be produced by the candidate immediately on his being desired to appear for examination.

Although the above are the only qualifications which are absolutely required in candidates for the appointment of assistant-surgeon, a favourable consideration will be given to the cases of those who have obtained the degree of M.D. at either of the universities of Oxford, Cambridge, Edinburgh, Dublin, Glasgow, or London, or who, by possessing a knowledge of the diseases of the eye, and of any branch of science connected with the profession, such as medical jurisprudence, natural history, natural philosophy, &c., appear to be more peculiarly eligible for admission into the service, observing, however, that lectures on these or any other subjects cannot be admitted as compensating for any deficiency in those required by the regulations.

By the rules of the service, no assistant-surgeon can be promoted to the rank of surgeon until he shall have served three years in the former capacity, one year of which must be in a ship actually employed at sea; and it is resolved that not any diploma or certificate of examination from either of the aforesaid royal colleg shall be admitted toward the qualification to surgeon unless the diploma or certificate shall obtained on an examination passed after od of not less than three years' actual servi ng that no one can be admitted to an nation for surgeon unless he be a member o of the above-named royal colleges; and wh assistant-surgeons, already in the service (wh e professional education may not be in accordan with the above), obtain leave to study previously to their passing for surgeon, they will be required. their examination, to produce testimonials of their having availed themselves of the period of leave to complete their education, agreeably to these regulations.

It is also to be observed, that candidates who may be admitted into the naval medical service must serve in whatever ships, &c., they may be appointed to, and that, in the event of their being unable to do so from sea-sickness, their names cannot be continued on the naval medical list, nor can they, of course, be allowed half-pay.

ORDNANCE MEDICAL DEPARTMENT.—63, PALL-MALL.

Regulations for the Admission of Candidates.—*Provisional List.*—Medical students who have completed their twentieth year, who have been well instructed in the Latin and Greek languages, the elements of mathematics and natural philosophy, and who can produce satisfactory proofs of being of good moral character, and diligent in the study of their profession and the sciences connected with it, may be entered in the provisional list of gentlemen desirous to be admitted candidates for employment in the Ordnance medical department. A knowledge also of modern languages, though not indispensable at the time of provisional reception,

the list of candidates

retained on it after he is twenty-five, years of age.

The age of every individual must be verified by a certificate of his baptism, if it can be procured. He must be also unmarried, and in the full enjoyment of health, both bodily and mental.

Qualifications. Every candidate must produce a diploma from one of the colleges of surgeons of London, Edinburgh, or Dublin; and a certificate of qualification from the Society of Apothecaries in London. He must also bring proof of having diligently gone through the following branches of professional education, nearly all of which are required to enable him to take out the above-mentioned diploma and certificate—viz., of having served an apprenticeship of five years to a surgeon and apothecary, if educated in England; but if

A SESSIONAL SYNOPSIS FOR LONDON.

	Anatomical Demonstrations	Anatomy, Descriptive and Surgical.	Structural and General Anatomy and Physiology.	Chemistry.	Materia Medica and Therapeutics.	Theory and Practice of Medicine.	Principles and Practice of Surgery.	Midwifery, and the Diseases of Women and Children.	Botany.	Medical Jurisprudence.	Comparative Anatomy.
Aldersgate-st. School		Mr. Clance	Mr. Holthouse	Mr. Ronalds	Dr. A. B. Garrod	Dr. Aldis and Dr. Klein Grant	Mr. Alfred Smee, FRS	Dr. Brodie Sewell and Mr. Edw. Latham	Dr. Arlidge	Dr. John J. Snow	Dr. Rayner FSA, AKC Mr. S. R. Pittard
Bartholomew's School and Medical College	Mr. M'Whinnie and Mr. Holden	Mr. F. C. Skey, FRS	Mr. Paget	Mr. T. Griffiths	Dr Leith Roupell, FRS	Dr George Burrows	Mr. Lawrence, FRS	Dr. Rigby, FRS	Dr. Farre, FLS	Dr. Baly	Mr. M'Whinnie
Charing-cross Hospital	Mr. Hird and Mr E. Canton	Mr. Hind	Mr Wharton Jones, FRS	Dr. P. B. Ayres	Dr. Steggale and Dr Willshire	Dr. Shearman and Dr. Rowland	Mr. Hancock	Dr. Chowne	Dr. Willshire	Dr. Chowne and Dr. Gavin	
Charlotte-st School of Medicine, Bloomsbury	Mr. Dermott	Mr. Dermott	Mr. Dermott	Dr. J. Ryan and Dr. T. Brown	Dr G. Smyth	Dr. C. J. B. Aldis	Mr. Dermott	Dr. T. Smith	Mr. B. Clarke	Dr. R. Barnes	
Guy's Hospital School	Mr. J. Birkett & Mr. A. Poland	Mr. Cock and Mr. Hilton	Mr J. Birkett	Mr. Aikin and Mr. Taylor	Dr. Addison and Dr. G. Bird	Dr. Addison	Mr Morgan and Mr. B. Cooper	Dr. Lever and Dr. Oldham	Mr. Johnson	Mr. Taylor	Mr. Gull
King's College	Mr. Simon and Mr. Bowman	Prof. Richard Partridge, FRS	Dr. R. B. Todd, FRS	Dr. W. A. Miller, J. Bowman, Esq. (Demonstrator)	Dr. J. F. Royle, FRS	Prof. G. Budd, MD, FRS	Prof. W Ferguson, MD, FRS	Prof. A. Farre, MD. FRS	Prof. E. Forbes FRS, FLS	Prof. W. A. Guy, M.D.	T. R Jones, FRS
London Hospital School	Mr Critchett and Mr. Ward	Mr. Adams	Dr Carpenter, FRS	Dr. Pereira and Dr. Letheby	Dr. Pereira, FRS	Dr Little	Mr. Luke and Mr. Curling.	Dr. Ramsbotham		Dr. Ramsbotham and Dr. Frampton	
Middlesex Hospital School	Mr Charles H. Moore	Mr. Campbell, Dr. Morgan, and Mr. H. M. Rowdon	Mr Erasmus Wilson, FRS	Mr. Ronalds	Mr. Day	Dr Crawford	Mr. Arnott, FRS, and Mr Shaw	Dr West	Mr. Henfrey, FLS	Dr. Latham	
School adjoining St. George's Hospital	Dr W. V. Pettigrew and Mr. G. E. Blenkins	Mr. Lane, Dr Pettigrew, and Mr. Blenkins	Mr. Lane, Dr. Pettigrew, and Mr. Blenkins	Mr. Rogers	Dr. Lankester, FRS, FLS	Dr. Goolden and Dr. T. Thompson	Mr. Lane and Mr. Pilcher	Mr Bloxam	Dr. Lankester, FRS	Mr. Ancell and Mr. Warder	
St. George's Hospital School	Dr. H. Jones and Mr. Athol Johnson	Mr. Prescott Hewett	Dr. Handfield Jones	Mr. Brande, FRS	Dr. Pitman	Dr Nairne and Dr. Page	Mr. Cæsar Hawkins and Mr. Tatum	Dr. Robert Lee, FRS	Mr. Henfrey, FLS	Dr. Bence Jones FRS, and Mr. H. C. Johnson	
St. Thomas's Hospital School	Mr. J. Rainey	Mr. F. Le Gros Clark	Mr. Grainger	Dr. Leeson and Mr. Heisch	Dr. Risdon Bennett	Dr Barker and Dr George Gregory	Mr. Green and Mr. B. Travers	Dr Cape and Dr. Waller	Mr. J. Luxford	Dr. Leeson and Dr. Risdon Bennett	Mr. E. Meryon
University College Medical School	Mr. G. V. Ellis and Dr J. P. Potter	Mr. Richard Quain, FRS	Dr Sharpey, FRS	Mr Graham, FRS, and Mr Fownes, FRS	Dr A. T Thompson, FLS	Dr. C. J. B Williams, FRS	Mr S. Cooper, FRS, and Mr. Liston, FLS	Dr Murphy	Dr. Lindley, FRS	Dr. A. T. Thompson	Dr. Grant
Westminster Hospital School	Mr. Pennell and Mr. Barnard Holt	Mr. Erichsen and Mr. Pennell	Mr. Erichsen and Mr. Pennell	Mr Harman Lewis	Dr. Basham	Dr. H. Roe and Dr. Kingston	Mr. B. Phillips, FRS	Dr Andrews and Dr. F. Bird	Dr. Basham	Dr. F. Bird	

PROVINCIAL SCHOOLS.

Bristol Medical School		Mr. Prichard	Mr. Helmg and Dr. Fripp	Mr. Herepath	Dr. Staples and Dr. Fairbrother	Dr Budd and Dr. G. Fripp	Mr. Clark and Mr. Green	Mr Swayne and Mr. J Swayne	Mr. Rootsey	Dr. Kay	
Leeds School of Medicine		Mr. Price, Mr Radclyffe, and Mr. Stamland	Mr. Teale, Mr. Nunneley, Mr. Ikin, and Mr. S. Hey	Mr. Morley and Mr. West, FRS	Dr. Pyemont Smith and Dr Heaton	Dr. Chadwick	Mr Hey and Mr. Garlick	Mr. Smith and Mr. Braithwaite	Dr. Heaton	Dr. Pyemont Smith.	
Manchester School of Medicine and Surgery	Mr. W. Smith	Mr. W. Smith	Mr. Turner	Mr. Davies and Mr J Leigh	Dr. Ainsworth	Dr. Howard	Mr. Ransome	Mr. Heath	Mr Just and Dr. Hardy	Mr. J. Leigh	
Queen's College, Birmingham	Mr. D. Bolton	Mr. W. Sands Cox, FRS	Mr. Langston Parker	Mr J. G. Tilley	Dr James Johnston and Mr G B. Knowles	Dr. John Eccles	Mr. W. Sands Cox, FRS	Mr. Sam. Berry	Mr. G. B. Knowles, FLS	Dr. J. Brit Davies	

WESTMINSTER SCHOOL; *Physicians* Drs. Bright, Roe, Kingston, Basham. *Practice*, £21.—*Surgeons:* Messrs. White, Lynn, Hale Thomson, Phillips. *Practice*, £31.—ST. GEORGE'S HOSPITAL; *Physicians:* Drs. Seymour, Wilson, Macleod, Nairne, and Page. *Practice*, £24 Guineas.—*Surgeons:* Messrs. Keate, Hawkins, Cutler, Tatum, H. J. Johnson, and H. C. Johnson. *Practice*, £50 Guineas.—ST. THOMAS'S HOSPITAL; *Physicians:* Drs. R. Williams, Burton, Barker, Leeson, Goolden, Risdon Bennet. *Practice*, £24 3s. *Surgeons:* Messrs. Green, South, Macmurdo, Solly, B. Travers, and F. Le Gros Clark. *Practice*, £28 6s.—KING'S COLLEGE HOSPITAL; *Physicians:* Drs. Watson, Budd, Todd, Farre, and Guy. *Practice*, £21.—*Surgeons:* Messrs. Arnott, Fergusson, Partridge, Simon, and Bowman. *Practice of both*, £36 15s.—MIDDLESEX HOSPITAL; *Physicians:* Drs. Hawkins, Wilson, and Crawford. *Practice*, for eighteen months, £12 12s.—*Surgeons.* Messrs. Arnott, Tuson, and Shaw. *Practice*, £21.—UNIVERSITY COLLEGE HOSPITAL; *Physicians:* Drs. C. J. B. Williams, Thompson, Taylor, and Walshe. *Surgeons:* Messrs. Cooper, Liston, Quain, and Morton. *Practice for both*, £26 5s.—BARTHOLOMEW'S HOSPITAL: *Physicians:* Drs. Roupell, Hue, Burrows, Farre, Jeffreson, and Black. *Practice*, 30 Guineas. —*Surgeons:* Messrs. Vincent, Lawrence, Stanley, Skey, Lloyd, and Wormald. *Practice*, 25 Guineas.—LONDON HOSPITAL; *Physicians:* Drs. Cobb, Frampton, Little, Pereira, Fraser, and Herbert Davies. *Surgeons:* Messrs. Andrews, Luke, Hamilton, Adams, Curling, and Critchett. CHARING CROSS HOSPITAL; *Physicians:* Drs. Shearman, Golding, and Chowne. *Practice*, 15 Guineas.—*Surgeons:* Messrs. Hancock and Avery. *Practice*, 15 Guineas. —GUY'S HOSPITAL; *Physicians:* Drs. Bright, Addison, Babington, Barlow Hughes, Owen Rees, and Golding Bird. *Pupil*, for eighteen months, £15 15s.; for longer period, £24 4s.—*Surgeons:* Messrs. B. Cooper, Key, Morgan, Callaway, Cock, and Hilton. *Practice*, 50 Guineas.

not, qualification in the practice of medicine and pharmacy equivalent thereto;—of having attended the practice of surgery in a recognised hospital or hospitals, where clinical instruction is constantly given for three years, three months being allowed for a vacation in each year;—of having attended the undermentioned lectures, &c.:—

Anatomical lectures. Ditto—demonstrations. Ditto—dissections	Three anatomical seasons or sessions.
Morbid anatomy and pathology	one course.
Lectures on the principles and practice of surgery, delivered in two distinct periods or sessions	two courses, each comprising seventy lectures, on one course of surgery, and one of military surgery.
Natural history, or comparative anatomy	one course.
Chemistry	one course of a hundred lectures.
Botany	one course.
Materia medica and therapeutics	one course of a hundred lectures.
Lectures on the principles and practice of medicine	two courses, each a hundred lectures; second and third winters.

Medical practice, with clinical lectures, eighteen months, commencing the second session, viz., twelve months in a recognised hospital, and the remaining six months either in a recognised hospital or a dispensary.

Medical jurisprudence, with toxicology	one course of fifty lectures.
Midwifery	two courses each of lectures, second and third sessions.
Practical midwifery (not less than thirty cases)	After the conclusion of the first course of midwifery lectures, a certificate of having passed the usual examination is to be produced.
Diseases of the eye (with attendance on patients of that class)	one course.

He must produce a diploma from either of the colleges in London, Edinburgh, or Dublin, and, if not a graduated M.D. of Scotland or Ireland, after having actually passed an examination in the university where he has obtained his degree, a certificate of qualification also from the Society of Apothecaries in London. It is likewise expected that candidates shall have attended establishments for the cure of diseases of the ear and skin, and for the treatment of patients affected with mental derangement. Certificates will not be received on more than two branches of science, from one and the same lecturer; but anatomy and physiology, demonstrations and dissections, materia medica and botany, will be respectively considered one branch of science. In the certificates of attendance on hospital practice, and on lectures, the dates of commencement and termination are to be inserted in words at full length. The moral conduct and character of each individual must be certified by the gentleman to whose care his education was confided; and also by a clergyman, who, if practicable, should be the incumbent or officiating minister of the parish in which the applicant usually resides. The documents above detailed are to be inspected by a board, to consist of not less than five medical officers, after which they are to examine the candidate as to his professional acquirements. If his education has been chiefly medical, the examination will be principally in practical surgery; but if surgical, in the theory and practice of physic, including pharmacy. The full qualification being required on admission, a second examination is deemed unnecessary.

EAST INDIA COMPANY'S SERVICE.—REGULATIONS FOR THE ADMISSION OF MEDICAL GENTLEMEN INTO THE EAST INDIA COMPANY'S SERVICE AS ASSISTANT-SURGEONS FOR INDIA.

Age.—The assistant-surgeon must not be under twenty-two years, in proof of which he must produce an extract from the register of the parish in which he was born.

Qualifications in Surgery.—The assistant-surgeon, upon receiving a nomination, will be furnished with a letter to the Court of Examiners of the Royal College of Surgeons, to be examined in surgery, and their certificate will be deemed a satisfactory testimonial of his qualification; but should the assistant-surgeon be previously in possession of a diploma from the Royal College of Surgeons of London, or of the College of Surgeons of Dublin or Edinburgh, or of the College and University of Glasgow, or of the Faculty of Physicians and Surgeons of Glasgow, either of them will be deemed satisfactory as to his knowledge of surgery, without any further examination. He is also required to produce a certificate from the cupper of a public hospital in London, of having acquired and being capable of practising with proper dexterity the art of cupping.

Qualifications in Physic.—The assistant-surgeon will also be required to pass an examination by the Company's examining physician in the practice of physic, and to produce satisfactory proof of his having attended at least two courses of lectures on the practice of physic; and, above all, that he should produce a certificate of having attended diligently the practice of the physicians at some general hospital in London for six months.

The assistant-surgeon is also required, as a condition to his appointment, to subscribe to the Military or Medical and Medical Retiring Fund at his respective presidency, and also to the Military Orphan Society, if appointed to Bengal.

The assistant-surgeon is required, by a resolution of court of the 21st of May, 1828, to apply at the office for cadets and assistant-surgeons for his orders for embarkation, and actually proceed under such orders within three months from the date of being passed and sworn before the committee for passing military appointments; he will then be furnished with an order to obtain the certificate of his appointment, signed by the secretary, for which he will pay a fee of £5 in the secretary's office.

Assistant-surgeons who shall fail to apply at the cadet apartment for their orders within three months from the date of their being passed and sworn before the committee, or shall not actually proceed under such orders, are considered to have forfeited their appointments, unless special circumstances justify the court's departure from this regulation.

APOTHECARIES' HALL.—Gentlemen admitted members on Thursday, September 17:—Robert Thomas Martland, Francis Barlow, William Fancourt Tomkins, Joseph Clegg, Charles Sturges, and James Hunter Blair Sandon.

WAR-OFFICE, Sept. 18.—44th Foot: To be Assist.-Surg., Edward Robertson, M.D., from the 69th Foot, to be Surg., vice Murray, promoted on the Staff. To be Assistant-Surgeon: Assist.-Surgeon, Robert Villiers George, M.D., from the 3rd West India Regiment, vice Robertson, promoted in the 44th Foot. Hospital Staff: Surg. Denis Murray, M.D., from the 44th Foot, to be Staff Surg. of the First Class, vice Charles Quarterly Palmer, who retires upon half-pay.

HOSPITAL STAFF.—Surgeon William Carson, M.D., from the 1st Foot, to be Staff Surgeon of the Second Class, vice Knox, who exchanges; Dowell O'Reilly Clayton, M.D., to be Assistant Staff Surgeon, vice Traquair, who resigns.

NAVAL APPOINTMENT.—Dr. Thomas Graham, Assistant-Surgeon to the Madagascar.

NAVAL INTELLIGENCE—PROMOTION.—Oliver Thomas Miller, Assistant-Surgeon, Vindictive, to be Surgeon to the Vesuvius.

Mr. O. Smee, F.R.S., surgeon to the Bank, is about to bring out, in an octavo volume, some important observations on the potato disease. Mr. Smee's views extend not only to the theory of the question, but to the practical application of remedies in every case—in Mr. Smee's opinion, efficacious.

The first case of cholera at Teheran appeared in that part of the town which is nearest to the direction followed by the miasma.

TO CORRESPONDENTS.

A Subscriber.—*The appointment took place in 1838. Mr. Stirling was the person succeeded.*

Mr. Brown.—*The petition against the registration bill has been received. We are unable to notice it this week, on account of the press of matter inseparable from our publishing the index and students' number.*

Many gentlemen who have written volunteering further information, in answer to our application for the prospectus of the schools with which they are connected, are thanked for their attentive politeness.

A Charing-Cross Student *has attended the lectures required by the College of Surgeons, with the addition of medical practice, which they do not require. He can try the effect of petitioning the Society of Apothecaries, however, although we do not think he should be sanguine respecting the result.*

A Constant Subscriber *has sent us the handbill of an institution at Pimlico, which professes to provide the labourer and mechanic with every attention his case may demand without any fee being required, unless medicine be necessary, in which case the retail price of the drugs only will be charged. We regret to see such an establishment disgracing the neighbourhood of Pimlico.*

A Student.—*The work named is a very good one. We have already recorded our opinion of "Chelius' Surgery."*

Mr. Sabben.—*The work was reviewed from the French.*

An Experienced Surgeon's *communication has been received.*

Numerous communications have been received. We are precluded from noticing the greater number by press of matter.

Several gentlemen whose advertisements are unavoidably omitted this week, *in consequence of our publication of the Students' Number, are requested to accept our excuses.*

H. P.—*The abuse stigmatised at the University College Hospital deserves and shall receive attention.*

Vindex.—*The committee of inquiry at St. Pancras have decided, after patient investigation, that the charges were groundless.*

The "Ten Towns' Messenger" *has been received.*

The "Leicester Journal" *contains an account of a meeting held at the Leicester Infirmary, at which the following resolution was, after considerable discussion, carried by a small majority.—"That a committee be appointed to examine into the whole question of the medical arrangements of the Leicester Infirmary; to compare the existing rules with the prevailing practice, and to consider whether any and what alterations may be made to increase the efficiency of the charity, and to promote the ends of medical and surgical science; that they be requested to report the result of their proceedings to the next annual meeting, and to give such notices at the preceding Quarterly Board as shall enable the Governors to carry their recommendations into effect."*

THE MEDICAL TIMES.

SATURDAY, SEPTEMBER 26, 1846.

THE NATIONAL INSTITUTE.

THE political prospects of our profession were never more auspicious than at this moment. When an enemy grows abusive we may begin to believe in our own prosperity, since it is in the nature of envy to sicken at the triumphs in foes itself has vainly attempted to achieve. The National Institute is no sooner established, and gaining the confidence and support of all men of public spirit, when an eccentric individual who has, for months past, lain concealed like a baffled beast of prey, suddenly starts into the daylight, and exhausts his foolish fury in personal vituperation and polemical rancour. This very odd person has, on his old plan, sought to disparage the National Institute by wilful perversions of the truth, gratuitous assumptions, and dishonest arguments. Like the bush-fighters in Southern Africa, he lies in ambush for his antagonist, to strike a blow at a critical moment, under any temporary advantage; his weapon the poisoned arrow; his strategy the instinct of cowardice; his counsel the instigation of falsehood.

It is scarcely necessary to warn our readers against approaching the desolate shrine of moral pollution, the scene of these frantic ravings. Who knows not that its influence has a magic power of blighting all of character that advances within the unclean circle? That nothing prospers within its unholy limits; that its praises are calumnies which undo a man; that its support is certain ruin; its proximity, moral disease and desolation?

We are impudently told (*thence !*) that the *New Institute* is on precisely the same plan as the *British Medical Association*, the *Association of Surgeons*, and the *Medical Protection Assembly*. "A living dog is better than a dead lion," we are told; but with this person our living lion is no better than his dead dogs.

Having made this notable discovery, he coolly informs us that the *New Institute* can do no more good than these dead ones have done; and he goes on to imply that no political or scientific association (for he has identified the Institute also with the Medico-Chirurgical Society) can ever benefit the profession. What, then! does this man deliberately confess himself to have been the most unprincipled hypocrite that ever bartered character for public notoriety? Was this man not a true member of the British Medical, the Protection, and the other Associations his connection killed; and has he not vaunted their merits and their utility just as surely as he destroyed them? He *discovers* (!) the National Institute to be upon the same plan (Heaven forefend it !), and with modest assurance he informs the profession that this body can effect nothing beneficial for the profession! What an amusing person!

Are all associations for political purposes valueless, then? Oh, no! He would *like*—very much like—to have a snug little coterie of his own, to whom he could prescribe laws, and dictate plans of operation. Fifty shameless attempts *are unsuccessful*—only suggest the fifty-first! There is a Medical Registration Bill to be passed, and there must be a little machinery organized to give a countenance to the scheme; for he is yet not tired of forcing himself on the profession, after a thousand rebuffs. Then, as money is the sinews of war, a subscription must be entered on, and the munificent sum of half-a-crown per head is requested to be forwarded to a central board *in nubibus*. It is by such a peddling affair as this—equalled only by the penny subscription got up by five innkeepers in Camden-town to meet the same worthy's political necessities—that the profession are to be seduced from their noble enterprise.

We suggest that the innkeepers forming the penny-subscription committee will unite with their half-crown brethren in mendicancy, and thus save the unnecessary expense of divided labours. This individual's operations must ever revolve in a circle of which an intense selfishness is the centre of motion. Let him pursue his own ambiguous career, but let him not dare to asperse the motives or impede the movements of worthier men. If he attempt to cast a shadow upon the brightest prospect the expectant eyes of the profession ever viewed—to damp the purest enthusiasm, or belie the noblest aims, that ever distinguished an honourable society—WE WILL REVEAL! Is a society,—a whole profession—to be trifled with, bearded, and insulted, because a political adventurer is shut out from the enjoyment of that influence to which his previous conduct has entirely disentitled him? Is the destroyer of every society with which he had been connected to be welcomed into the new brotherhood? Is the snake, who has shot his envenomed tongue into the heart of his once blinded friends and most devoted coadjutors, to be again foolishly taken to the bosom? Such folly would indeed receive its own reward.

The National Institute, however, is *not* similar to any of the previous medical associations, in two or three essential particulars: the character of its development, the respectability of its leading members, and the large resources which it will be enabled to command. We do not wish to say a single syllable against the character or respectability of any member of our profession. It is a mean propensity to calumniate individuals, and we scorn it. We denounce the despot of public opinion--arrogant in mien, and low and unscrupulous in means—not because we fear him, but because it is a public duty. We will not breathe a suspicion upon men who, in accordance with the dictates of their intelligence, have been seeking for the acquisition of some public good. If, then, we say that previous associations were not composed of the same elements of respectabilty, we, to a great extent, state a fact which accounts for their failure. The best men temporarily connected with those associations have already joined the Institute, and of course their opinion, derived from experience, is, that the Institute *can* do some good. That it can do it, and will do it, we have no doubt. It must be remembered that the Institute, although framed upon the most liberal principles, is, essentially and associatively, a body of general practitioners. Herein consists its strength, and the promise of its success. The other societies were heterogeneous, cosmopolite masses, that tumbled to pieces at the first shock from without, or the first division within. There was no identity of interest, none of feeling, none of habit, none of end. The unity of the National Institute is its political characteristic.

The Institute has, hitherto also, been, in a pecuniary point of view, eminently successful—far more so, as respects the number of subscribing members, than the association from which it originated ever was; and five times more so than any other association established for similar purposes. An attempt has been made to rouse the fears of the profession, and to pander to the most sordid propensities of our nature, by holding out suspicions that a large call will be made upon the pockets of the members for the erection of a building and the formation of a museum and library, and all other appendages of a scientific body. Let not the members be alarmed. It will be their pride to form their own museum, by contributions of preparations in anatomy, pathology, and natural history, without, at all events, immediately raising a fund for these purposes. There are thousands of preparations scattered throughout the country in the surgeries, museums, and consulting rooms of the general practitioners. These will, doubtless, be placed upon the shelves of the *National Institute*. The same may be said of books. Duplicate copies of volumes will be deposited in the library of the new Institute, larger donations will follow, and a collection will soon be amassed that will redound to the high honour of our profession. Offers both of preparations and books have already been made from numerous quarters, and we have no doubt that a very few months will see the National Institute in the possession of a good library and museum, raised by the individual exertions, the untaxed donations, of its members.

It is self-evident, however, that a large success must depend upon an extensive support. Numbers are wanted, and with numbers funds will come. Let every man impress the importance of the success of this undertaking on his brother practitioner; let him make the business of the Institute his own; let him earnestly inculcate the expediency of the noble objects which the Institute is founded to embrace and achieve; let him go to his work in a proselytizing spirit—as a man convinced of the truth of his own opinions, and burning for the welfare and honour of his profession We saw an account a few days since of the London Trades' Unions, containing seventy-five members, established two years only, and already with £100 in the funds. Lectures are given, discussions held, the periodicals are taken in, a library is formed, and essays on the most important commercial and civil relations of the subject are read; and, notwithstanding the outlay required for these objects, a hoard is gradually accumulating for the accomplishment of yet more permanent advantages. Let us learn

a lesson from the humble, and show ourselves worthy of that enlightened and emulous spirit that characterizes our age. Independence of thought is a necessary step to this end; and let us fortify that spirit of boldness and truth that will not hesitate to pursue the Marplot to his chamber of intrigue, and rebuke the reviler in the moment of his wrath.

The professive calumniator is clearly smarting under some hidden wound; his galled spirit winces, although he is unwilling to acknowledge the torture. The Registration Bill was rejected; *hinc illæ lachrymæ!* He is sunk in shame and vexed by defeat, and he would fain revive his disconsolate spirit. It is a remarkable thing that a man who has possessed so many opportunities of gaining experience, should so rashly place himself in ridiculous situations. Drunk with self-love, he reels to the ground before the reproving eye of the world, and, like a bloated Bacchus, writhes, foams, and roars for some friendly hand to lift him out of the mire in which he wallows. A most unhappy fatality tracks his progress; at each step he slips aside; and, with each attempt at recovery, his fall becomes more imminent. Are we severe? We intend to be so. An irreconcileable public enemy deserves no quarter. An insidious, daring, and revengeful opponent requires a keen blade dealt with a heavy hand for his chastisement. But let him go; we have already spent too much time in lowering a man who has already lowered himself far deeper than we could ever precipitate him.

Although an exposure of baseness is sometimes necessary to prevent virtue suffering contamination and *defeat*, yet it is not by such means that any great advance has ever been made in promoting the welfare of society and elevating the character of its institutions. Reproof is a reluctant duty; the expression of liberal sentiments is the natural evolution of the heart. It is only as we seek to establish the truth in its more amiable, ennobling, and sympathetic tendencies and manifestations, that we succeed in making any real progress in public amelioration, or consolidate any permanent benefits. This is our mission, and the mission of all who, engaging in the great cause of professional emancipation and of social elevation, expect to be honoured with success, and to be rewarded with the approbation of their brethren for their labours. We would teach forbearance, amenity, good faith, freedom from prejudice, a delicate sense of honour, mutual services, and a love of the profession which, by our membership, we are called upon to honour and dignify in ourselves. This is our duty, as doubtless it is our desire. Let these ethical principles be well established, and we shall deride the seductions of a political mercenary, and regard with scorn the machinations of a self-seeking Marplot.

"Impurus aer spiritus dejecit, infecto corde gigni morbos."—PAULUS.

"Qualis aer, talis spiritus; et cujusmodi spiritus humores."—ÆLIANUS MONTALTUS.

THE actual meaning of these mottoes is to some extent wide of the truth; but there is still a great deal of reality about them. Meteorology, despite all that has been done for it, is yet in its infancy, at least in so far as it relates to the living world. The conditions of the atmosphere, as regards density, dryness, humidity, and impregnation with foreign matters, are as demonstrable as a rule in arithmetic—there is even a law of storms; and whilst the mariner can predict wind and rain—the quarter and the quality of them—the philosopher, in his study, is not altogether ignorant of the forthcoming operations of atmospheric electricity. Our intercourse with the invisible fluid surrounding us is little short of the definiteness and certainty with which we can investigate the nature and properties of other more tangible bodies. We can decompose and recompose it, confine it in a given space, make it lighter or heavier, moist or dry, hot or cold, noxious or innocuous, at will; in fine, we have as much power over, and as much knowledge of, any selected portion of it as of almost any other ingredient of the inorganic world. And yet there is a vast something about it of which we know nothing at all.

Take an easterly wind, differing in no appreciable particular from its neighbours, and what a nuisance it is! All creation feels it, as it sweeps like a pestilence along! Flowers droop, and lose their brightness, and leaves shrivel, when it touches them. Let it glide ever so gently over the surface of a lake, and the cold-blooded fish avoids the shallows, and sinks into the depths of its native element, as though death floated on the water. In vain the angler tries his every artifice—the fish have lost their appetite, activity, and merriment—they will hide until the enemy shall have passed by. All animals have a horror of it; even a donkey is delicate enough to turn his back upon it; cows, horses, sheep, and even pigs, give it their posteriors to ply against. Man abhors it as he would a demon. Who ever heard of anybody being happy in an easterly wind? We should like to know whether any disciple of Momus ever fairly laughed in its face? We don't believe that the old founder of fun himself could have done such a thing. It broods like a nightmare upon one's spirits. Next to an evil conscience, there is no curse like it. It might have been sent on purpose "to make our bosom's lord sit heavily on his throne." Ask the hypochondriac how he feels under its fostering influence? He would answer in some such phrase as this:—

"Soluta mihi sunt omnia membra—
A capite ad calcem, sensusque omnisperiit
De pectore, tam immensus stupor animum invasit mihi."

It is in vain to ply your remedies against gout and rheumatism in an easterly wind. Patients respond to it like barometers. Try colchicum, calomel, opium, hot baths, no matter what—you have your trouble for nothing. Does anybody know what an easterly-wind headache is? We do; and only wish we knew how to describe it. It is one of those real, unmistakeable, downright tortures, compared with which most others are mere copies. It is equal to bowel complaint, tic douloureux, and toothache, all crammed into one! Moreover, it admits of no cure. It may condescend to go away, *sua sponte*, when the wind changes; but croton oil, of the very strongest, could not carry it off till then. Ask the old lady with the corns, what she thinks of an easterly wind? Depend upon it, she'll soon tell you where the shoe pinches. Ask the same question of the young lady with the taper waist, and, if she tell the truth—which, if you are a man of the world you will wonder at—she will delicately hint of a pain in her side. Don't venture the same interrogatory to an old maid turned of forty, unless you are her medical attendant. Such a query, in such a quarter, should be considered strictly *professional*.

We are not aware whether suicides and other crimes are more common when the wind is in the east, but we could readily believe it. Moreover, this nondescript Eurus occasionally brings with it a bane, quite equivalent in mischief to itself.

"Miramur quis sit tantus, et unde vapor!"

Nobody knows what it is, but in England we call it *blight*. It is a terrible something to the vegetable world, upon which it never alights but to leave death as a memento of its visitation. Husbandmen can tell of its approach, and can always trace its ravages; but beyond this, they have no knowledge whence it comes, or whither it goes, or how it carries on its career of destruction. But they are as wise as the philosopher, for he is as ignorant of it as the hind. Chemistry and pneumatics have nothing to say concerning it—it reveals none of its secrets to them—they have investigated, but all in vain.

Why is it that the east is so unlike every other wind that blows? Its opposite neighbour, is a goodly sort of breeze, that is acceptable to all folks, except such as owe their personal safety to the shortness of their passage across the Atlantic. Except with these, the gentle, genial zephyr is a favourite with everybody. It is the physician's sheet-anchor for the dissipation of coughs, colds, hoarseness, and headache. The south, again, with all its hydropathic tendencies, and an occasional bluster that has something of the bully in it, is yet far from disagreeable; and dangerous to nothing, except ships that are not seaworthy.

From the north, an atmospheric current may come, and, if single-handed, with impunity. It may redden one's nose, and pinch one's fingers, cause a little all-overishness, and suggest the desirableness of "comforters," thick-soled shoes, worsted stockings, and something stronger than cold water—but what of all this? A fine, clear, sharp, frosty day, is always acknowledged to be a "bracer" of animal spirits. To our taste, there is nothing like it for begetting an honest appetite and an easy digestion. It is an opportunity for merriment, good humour, and good health, all the world over.

But only let our northern visitant ally himself, as he comes along, with his left-hand neighbour, and he is directly contaminated by the contact. "Tell me what company you keep, and I will tell you what you are," never applied more truly to humanity, than it is capable of applying to sundry of our pneumatic visitants. A north-wester will do; but a north-easter is little better than a *simoon*. A current from the opposite hemisphere is as bad, if accompanied by its neighbour on the right. Only let that eastern sinner join issue with it, and then, farewell to all salubrity!

Not always, however, is the unhealthiness of climate, or season, due to the prevalence of east wind, or of its compounds. Take the present autumn, and the past summer, in illustration. Easterly winds have visited us not more commonly than usual, and yet, what sickness and mortality we have had! The farmer, on the whole, has fared tolerably well, if we except his potatoes and turnips. The former have early lost their vitality, as they lost it last year; and, as we said of them then, have *gone rotten*. It has been asked, what we mean by rotten? We mean, simply, that *decomposition, or play of chemical affinities*, which occurs in every vegetable or animal substance when its vital properties have left it, and it is placed in a certain atmosphere, and in a certain range of temperature! Nothing rots that has life in it; and living things are not easily preyed upon, to their total destruction, by parasites. The growths that are seen upon the so-called diseased potato, are a *consequence* of the death of the whole or part of it, and not the *cause* thereof. The mischief will be found in a *certain atmospheric condition*; and not in the idle parasite that is as common on logs of wood that have been exposed for years, as in the potato sprung from the seed of last spring. The *blight* and the *fly* have attacked the turnip—these are different from the "potato-disease," but they have a common origin with it. The great dearth of fruit, this season, is no doubt referable to the same cause. Nothing, in fact, has been up to the standard of health. A "taint" seems to have pervaded everything. Fish, flesh, and fowl—all have been complained of for their inferior quality. For the same reason, nothing would "keep," as butchers say. No matter what the temperature, an animal was no sooner dead than it began to decompose. Venison, instead of slowly acquiring a flavour by a few weeks' exposure, has regularly gone rotten, though placed in a draught and kept cool by artificial means! Gastronomists have been sad sufferers by this tendency to decomposition. Beer and ale, for the same reason, have been unfermentable, undrinkable, and as flat as ditch-water. Even milk, *properly so called*, has partaken of the same tendency to corruption, as batter puddings and baby's food have abundantly testified.

Has not this strange atmospheric condition had a share in producing the diarrhœa and dysentery that prevailed two months ago, and the low fever that prevails now? Our readers will recollect that, when Asiatic cholera was in London some years back, dead substances had a remarkable tendency to putrefaction. A piece of meat was sent up higher than St. Paul's, and yet it became offensive in a few hours. The atmospheric condition was, therefore, not confined to localities, but seemed to be general. It consists with our own experience to believe that there is the same prevalence now. We have occasionally observed that the inhabitants of ill-ventilated, ill-drained districts, who have been insufficiently clothed and fed, have suffered more fatally from diarrhœa and fever, than others better circumstanced; but they have not suffered singly. Amongst the best families, and in the best situations, we have seen the disease creep, and the rich and the poor have been made alike its victims! Nothing that domestic care and professional skill could do, to save those who were competent to pay any amount of money for either, served to secure them, in too many instances, from the ravages of the epidemic. Poverty might hasten its work of destruction—but affluence, with its concomitant privileges, purchased without scruple, furnished no exemption. As we have said, it is our belief that the *cause* is in some peculiarity of the atmosphere. We throw out the hint of investigation to those who have time and opportunity for the task. There is a secret something that is worth finding out.

MISCELLANEOUS CORRESPONDENCE.

THE GOWER-STREET SCHOOL.

[To the Editor of the Medical Times.]

SIR,—If you will have the goodness to give me your valuable advice, I shall feel truly obliged.

I came as a student to London, intending to enter at University College, but I hear accounts of the bad system which prevails there, and of the jobbing which takes place in several things. I find, too, that there are no regular demonstrations of anatomy, but that the papers are filled up irregularly, Mr. Quain refusing to sign them, but writing something at the end, at which the registrars laugh,—"he being a professor and not a demonstrator."

Would you advise me, then, to enter there, or to go to King's College, or Guy's, or St. Thomas's?

I am, Sir, yours most obediently,

JUNIUS.

PRACTICES AT THE UNIVERSITY COLLEGE HOSPITAL.

[To the Editor of the Medical Times.]

SIR,—Knowing the readiness with which, on all occasions, you exert your powerful influence in the correction of abuses, wherever existing, I beg leave to draw your attention to one in particular, as relating to a public charity, which has long required notice and severe animadversion. I allude to the very indiscriminate admission of persons to the Patients' Department of University College Hospital, so very many being received whose circumstances and situations in life by no means warrant any claim to assistance from such an Institution, and which a due sense of propriety should dictate. But I am sorry to say there are those who, governed by a sordid meanness, will resort to all manner of unbecoming schemes and paltry artifices, to obtain advice and assistance gratis; a practice which, in my opinion, cannot be too promptly or sternly checked. Is it consistent or proper with the purport and spirit of such an Institution, that patients should be hanging about the waiting-rooms in their silks and satins, with rings on their fingers, and other expensive ornaments of dress, receiving gratuitous medical advice and medicines? Such, however, is daily the case, and is a glaring and monstrous abuse of this or any similar charity, intended only for the relief of the needy and necessitous. Moreover, it is also used as a means of domestic economy to the families of *noblemen*, gentlemen, and wealthy tradesmen, with large establishments, who, for a trifling subscription of one guinea per annum, claim the privilege of inundating the hospital with their servants, assistants, and dependants; and not unfrequently branches of their own family. Added to this the frequent admissions, *and very marked attentions*, paid to the servants of private patients of the medical officers. Chronic cases, which are well known to be perfectly incurable, and persons with mere imaginary complaints, are prescribed for regularly, many months in succession, thus taking up much valuable time, which could be better given in attending to more worthy objects. And the waiting-room of the hospital is made a sort of lounge, by numerous young women, where they may gossip and make assignations with thoughtless and idle young students, of whom there are always plenty in a large medical school.

I am, Sir, your most obedient humble servant,

Sept. 21. AN OLD STUDENT.

GOSSIP OF THE WEEK.

Dr. W. B. Waterman, of Buffalo, has been sentenced to three years' imprisonment in the New York State Prison for disinterring bodies for anatomical purposes.

The root of the dahlia contains a bitter principle of so acrid a nature that its employment as food has always hitherto been despaired of. The "Journal de Chambery" states, however, that this bitter principle is removed by boiling much in the same manner as the potato is cooked. The dahlia root may therefore, it would appear, in some measure be substituted for the potato during the present scarcity.

The latest news from India brings reports up to the 2nd of August from Calcutta, and the 9th from Madras. It is stated by the Indian journals that the cholera rages with great violence at Kurratchee, and that 226 had died in two days; half of this number are said to have belonged to her Majesty's 86th Regiment of the line. No officers are reported to have died, but the natives have been cut off by hundreds. During the ten days, from the 14th to the 24th of June, 922 European and 600 native troops, and 7,000 inhabitants, are said to have died at Kurratchee. Burying and burning the bodies could not be proceeded with fast enough, so that mephitic exhalations had already begun to add to the causes of disease.

OBITUARY.—At Clay-cross, on the 16th inst., Mr. Charles Brown, surgeon, in his 77th year. On the 17th inst., at Worthing, C. F. Favell, M.D., of Sheffield. On the 9th inst., in his 27th year, Thomas Hugh Hesketh Davies, Esq., surgeon, Liverpool. At Corstorphine, on the 11th inst., Dr. William Henderson, in the 40th year of his age; much and deeply regretted. At Govan, on the 12th inst., Robert Austin, surgeon, Royal Navy. At Sheerness, on the 2nd inst., James Potter, M.D.

Mr. Samuel Barnes has resigned his office of Senior Surgeon to the Devon and Exeter Hospital.

MORTALITY TABLE.

For the Week ending Saturday, Sept. 26, 1846.

Causes of Death.	Total.	Average of 5 summers.	Average of 5 years.
ALL CAUSES........	863	898	968
SPECIFIED CAUSES...	861	892	961
Zymotic (or Epidemic, Endemic, and Contagious) Diseases..............	191	201	188
SPORADIC DISEASES.			
Dropsy, Cancer, and other Diseases of uncertain or variable Seat...........	101	99	104
Diseases of the Brain, Spinal Marrow, Nerves, and Senses................	124	155	157
Diseases of the Lungs, and of the other Organs of Respiration	214	227	204
Diseases of the Heart and Blood-vessels...........	20	23	27
Diseases of the Stomach, Liver, and other organs of Digestion	80	87	72
Diseases of the Kidneys, &c.	13	6	7
Childbirth, Diseases of the Uterus, &c.	9	9	10
Rheumatism, Diseases of the Bones, Joints, &c. ...	12	6	7
Diseases of the Skin, Cellular Tissue, &c.	2	1	2
Old Age.................	45	52	67
Violence, Privation, Cold, and Intemperance........	41	26	26

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